

Taking Advantages of Technologies: Using the Socrative in English Language Teaching Classes

Ayhan Kaya¹ & Nuri Balta²

¹School of Foreign Languages, Canik Basari University, Samsun, Turkey

²Department of Educational Sciences, Canik Basari University, Samsun, Turkey

Correspondence: Ayhan Kaya, Canik Basari University, Samsun, Turkey. Email: ayhankaya@basari.edu.tr

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Abstract The advantages of technology cannot be ignored and new technological applications come into our life almost every day. In this sense, it is inevitable to use those technological devices in the field of education for efficient teaching and learning. This paper deals with the attitudes of prep school students toward using Socrative in the classroom as a tool of response system in real time. Socrative is a smart student response system that enables instructors to discover or assess what students have learned in their lectures in real time. The study was conducted at the beginning of the second semester of 2014-2015 academic year in a university prep school. The survey was applied after the Socrative being practiced for a five-month period of first semester. The survey instrument which was previously used by Dervan (2014) was used to reveal students' attitudes toward Socrative. The result of this study indicated that Socrative is a right tool that can help to improve users' engagement in the classroom. Moreover, statistical analysis showed that there was no difference between the attitudes across gender.

Keywords: Attitude, Real Time Assessment, Teaching with Socrative, Technology in Education, Teaching English.

1. Introduction

Information and communication technologies become indispensable due to being used in various fields of study. In recent years, as in all areas, technology is increasingly being used in education as well and roads are being made to effectively benefit from the technology in all areas of education (Çiftçi, et al., 2013). The use of technology is seen as an indicator of a high quality education by many educators, teachers and researchers (Çakır, & Yıldırım, 2009). There are so many web sites and so much software used in the learning and teaching process and this helps instructors to draw learners' attention to the topic being taught in the classroom.

Learners' engagement is vital during the learning process because unengaged learners do not listen or attend to learning activities (Terrion & Aceti, 2012). In this instance, related technologies take part to enhance teaching and learning motivation. There are enough devices to motivate learners in today's classrooms, for example, smart boards, tablets, smartphones, computers, projectors etc. It is easy to integrate all of those devices by means of software and all of them provide a wide range of different modalities for the instructors to engage learners in the topic being taught (Dervan, 2014). Integrating smartphones with the other devices in the class helps to enhance individual and group learning outcomes along with enabling more interactive discussions among students (Duncan et al., 2012). Kolb (2011) argues that smartphones are very useful devices; thereby, students are using them anytime, they never let

go and they are always with student, and are always on. Using smartphone tools are helpful and practical for the instructors because they can observe the students' learning (Manuguerra & Petocz, 2011).

Information and communication technology in education is widely used for effective learning throughout the world (Balta & Duran, 2015). As a kind of information and communication technology, Socrative has so many benefits. It has proved to be a useful technology in the field of education. For instance, the results of the study of Coca and Slisko (2013) showed that Socrative and smartphones were feasible tools that can facilitate active physics learning in classrooms. Further, using Socrative in introductory biology and molecular biology service courses, Liu and Taylor (2013) indicated that the student response systems enhanced students' engagement with the material and helped their in-class learning. Furthermore, Awedh, Mueen, Zafar, and Manzoor (2015) investigated the effect of using Socrative and Smartphones on the collaborative learning of students in computer architecture course in a community college and their results disclosed that collaborative learning and engagement with Socrative through Smartphones in the class improved student learning performance.

There are several versions of tools used in the classroom. Clickers were popular in the recent past but they were eclipsed by the quickly changing improvements in educational computer programs, smartphones, and applications. Today universities provide internet connection and students bring their own devices. These innovations made clickers obsolete. Socrative is becoming one of the most popular student response system. Socrative is a smart student response system that empowers teachers to engage their classrooms. It is a very useful tool for instructors who have difficulties engaging their students in the material taught. It helps instructors to motivate their students to the material being taught. It gives an opportunity to see the result of taught material at once. It can be used anywhere, anytime as it facilitates learning, and getting feedback (Socrative home page).

2. How to use Socrative?

Being a smart student response system user requires internet connectable devices like smartphones, tablets, laptops etc., and Socrative users need to create an account from www.socrative.com. Instructors and students access Socrative through separate entryways. Once instructors create an account from Socrative they have their own virtual room and room name. They can create multiple choice quizzes, open ended quizzes online and exit tickets in their rooms or they can use the Socrative template for creating quizzes and import them into their room for future usage. Students need only to download the application to their smartphones or tablets. When they access the system they will be asked to enter the room name of their instructor. Before starting a Socrative quiz there are choices for setting the quiz. Instructors are able to choose student paced-immediate feedback. Students receive immediate right/wrong feedback and explanations after they answer each question. Students answer questions in order and cannot skip or change their answers. The instructor is able to monitor their progress via a live results table or student paced – student navigation. Students have the ability to edit questions, skip questions and navigate the quiz their own way. Once they've completed the activity they can submit the entire assessment. And again the instructor is able to monitor their progress via a live results table or teacher paced quiz (Teachers control the flow of questions). The instructor sends one question at a time and shows the responses as they come in. They can skip and revisit questions. There are additional settings: The instructor can disable student names, randomize question order, randomize answer order and disable student feedback. After finishing the settings the instructor clicks to start the quiz. At the end

when all the users finish answering the quiz the instructor clicks to finish and he/she will be asked, "How would you like your report(s)?" You can get it via e mail, download, send to Google drive, view chart or view later. The next step is choosing your report type. Instructor can get whole class Excel, individual student(s) PDF or question specific PDF, then submit it.

The aim of this study is to find out the attitudes of English language learners of prep school at a private University towards using Socrative in their academic performance. The following research questions guided this study.

1-What are the attitudes of English language learners' towards Socrative?

2-Do the attitudes differ across gender?

3. Research Methodology

3.1 Participants

The research was conducted at a private University in Turkey, where the Socrative program has been used for five months in prep school classes. There are 297 students in prep school, however, only 191 of them took part in answering survey questions because the others were absent when the survey was conducted. Of the 191 students, it was noticed that 45 students gave the same answer to all questions; therefore, those participants were eliminated. Of the 146 participants, 75 students were male and 71 of them were female. Their ages ranged from 18 to 40. The participants were from different departments, most of them were from the interior design department, the others were from civil engineering, architecture, molecular biology, and electronic engineering and international relations departments. The participants learn English in the University prep school, organized in 16 different classes and at different levels of English, divided according to principles of the *Common European Framework of Reference for Languages*. 5 classes are A2, 8 classes are B1 and 3 classes are B2. The CEFR describes foreign language proficiency at six levels: A1 and A2, B1 and B2, C1 and C2. Based on empirical research and widespread consultation, this scheme makes it possible to compare tests and examinations across languages and national boundaries (Council of Europe home page).

3.2 Instrument

The survey questions were taken from Dervan's (2014) study, which Dervan conducted at the Institute of Technology in Blancharstown, Dublin, Ireland. The survey questions were validated using a focus group of students by Dervan. The reliability check was also conducted through the data collected from the sample of this study. Reliability can be stated in terms of stability or consistency. Reliability check, which is generally articulated in the form of Cronbach Alpha, is a widespread technique. In this method, only a sole test is required for valuing internal consistency. In this study reliability for the instrument was calculated as .77 which is enough to reflect the consistency of the items.

The survey questions were about English language learners' attitudes toward using Socrative in prep school classes. The survey consisted of 6 questions; the first two questions were about demographic information, age and gender. The following 4 questions were about use the of Socrative. The first and fourth were yes/no questions, the fourth was about disadvantages of Socrative. If the answer was yes for the last question the participants were asked to expand on the perceived disadvantages. The second question included 6 sub-items on a four-point balanced Likert scale. The answer text was *strongly agree*

/ agree / disagree / strongly disagree. The third question was a five-point balanced Likert scale. The answer text was *use a lot more / use more / OK now / use less / use a lot less*. As mentioned earlier, the survey questions were extracted from another work (Dervan, 2014). However, it was adapted to the current work. Two sub-items were removed from the second question because one of the sub-items was about group-work using Socrative, however, Socrative was not used in group-work at our University.

3.3 Data Collection

The survey was conducted to learn about students' experience with Socrative after using Socrative for five months. The survey was conducted in classes through Socrative, and printouts were also used for those who did not have a smartphone to answer. The survey was conducted in sixteen classes simultaneously. 191 students answered survey questions and 17 instructors observed them. 51 out of 191 used printouts. There were several reasons: some could not access the Internet, some did not have smartphones, and some found printouts of the survey easier to answer. The authors started the survey through Socrative itself and left the virtual room on for an hour and observed the process online. At the end, the printouts which were used by the participants who could not use Socrative were collected. And their data were uploaded to Socrative as well. When time was over the virtual room was turned off and the authors got the report from Socrative in Excel format and started to analyze them.

3.4 The use of Socrative at Our University

All the instructors at our University were using the same materials and they taught according to the pacing which was prepared for prep school classes by the administration. An online quiz bank was created by the instructors on Moodle. Moodle is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning environments (Moodle home page).

Almost all the instructors at our University are using the Socrative program, especially the grammar instructors. They love using Socrative in their lectures, they think it is enjoyable to teach with Socrative and find it a beneficial tool for teaching English language. Instructors share their quiz codes on Socrative or use the Socrative template. It is very useful and user friendly. In class, the instructors explain the topic, and towards the end of the lecture they ask students to access Socrative by using their smartphones. The students write the instructors' room name and start to answer the questions related to the topic taught. While the students are answering the questions they see the results on the smart board in real time and this motivate them to continue. When they finish answering the questions they see their mistakes if they have any, and ask the instructors to explain the topic again or correct their mistakes. This method informs both the students and the instructors not to move to a new topic before covering the topic accurately, and at the same time, it enhances the students' learning.

Here are some of the instructors' comments on Socrative: Mustafa, who applied the Socrative in his lectures for four months at our University, states that:

I use the Socrative to assess my students' learning. I find it a new, useful and interactive application. While using the Socrative I observe that it helps me to engage my students in the lectures. Additionally, the most important feature of Socrative is that it can be used outside of

the class. This flexible feature of Socrative gives an opportunity for us to observe our students' improvement anytime and anywhere.

Ayşenur has been instructing for three years and she has been using Socrative for one year. She says:

As a teacher, I find Socrative very useful and practical. It is enjoyable for students to use their smartphones during the lesson as technology is a part of lives today. Also, there are tons of questions prepared by other teachers around the world. It helps us offer students different exercises.

Selahattin has been instructing for 9 years and has been using Socrative for one year. She states:

Socrative has changed the education atmosphere in our University. It is totally modern revision system, time saving and nature friendly.

3.5 Findings

Findings are organized according to the research questions.

A. What are the attitudes of English language learners' towards Socrative?

Students' attitudes were assessed through first, second, third and fourth questions of the survey. For each question of the survey, the findings are presented separately.

First question: Do you think the use of an in-class student response system such as Socrative was helpful to your learning?

The responses of 146 participants were complete and their data were used to reveal students' thoughts about the first question. Of the 146 students, only 14% answered *NO* while 86% answered *YES* for the first question. Furthermore, 61 (81%) male participants out of 75 selected *YES*, while 14 (19%) participants selected *NO*. On the other hand, 64 (90%) female participants out of 71 selected *YES*, while only 7 (10%) participants selected *NO* for the first question. According to these findings, it can be said that female users have more positive thoughts about using Socrative in class, and it is helpful for their learning.

Second question: Thinking about HOW Socrative helped your learning, please provide your response to EACH statement below (The statements are supplied on the graph depicted in Figure 1).

Results of users' answers to each sub-item of the second question are shown in Figure I. Each sub-item of the second question was scored on the Likert scale. The highest possible score was 584 points for each sub-item of the second question. The height of each column demonstrates the total scores given to that item by participants. Each column in Figure I shows the number of participants who selected the options for sub-items of the second question.

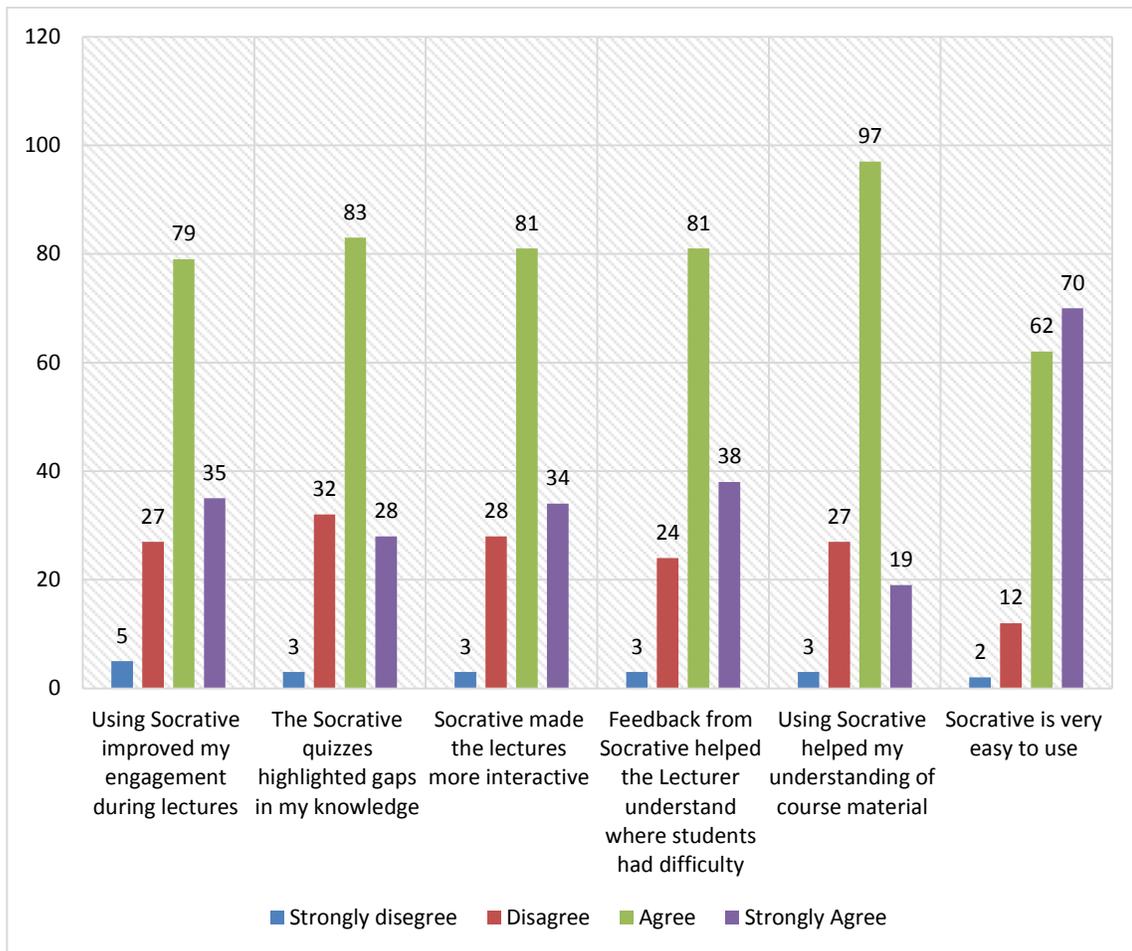


Figure 1. Results of the question 2 on the use of Socrative

As it is conspicuously seen in Figure I, *strongly agree* (70 students) was selected more than the others for the sixth item (Socrative is very easy to use) of the second question. Furthermore, participants chose *agree* (97 students) more than the others for the fifth item (Using Socrative helped my understanding of course material). Moreover, on all sub-items, only 3,4% or less participants chose *strongly disagree*. On one hand, among all sub-items, the total score of the sixth sub-item (Socrative is very easy to use) of the second question was 492, which is the highest score. On the other hand, the total score of the fifth sub-item (using Socrative helped my understanding of course material) of the second question was 424, which was the lowest. All in all, this figure is an indicator of positive attitudes toward Socrative.

Third question: Based on your experience of using Socrative this semester and thinking about next semester, please indicate your view as follows: I would like to see...

The third question was on a five-point balanced Likert scale, the total score was 519, and the average was 3.6 out 5. The results of the responses of 146 students on this question are depicted on Figure 2.

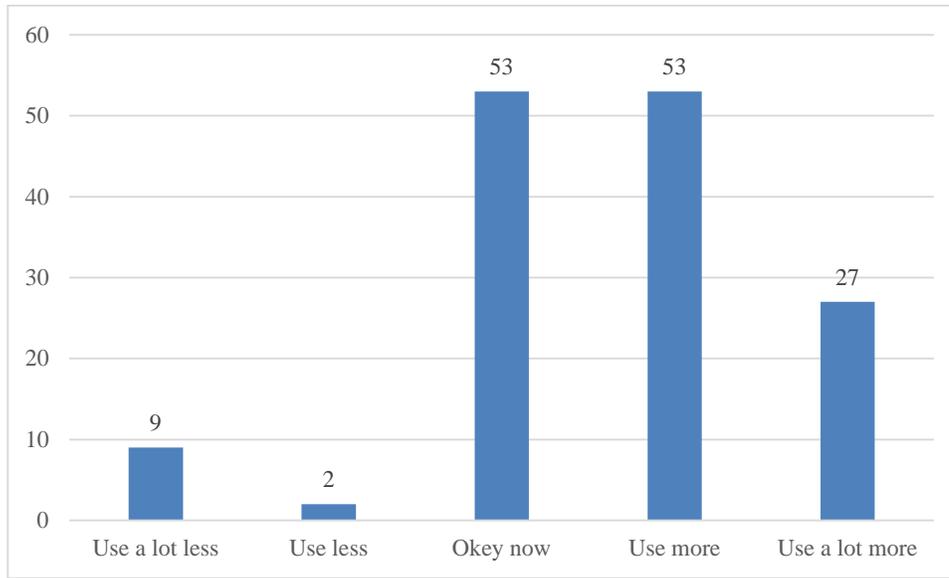


Figure 2. Results of the question 3 on the use of Socrative

According to Figure 2, while participants mostly chose *use more* and *ok now*, the choices *use a lot less* and *use less* were chosen the least. If we evaluate these findings according to gender, the female participants' total score of 262 (3.74 average) indicates a more positive outlook than male participants whose total score was 257 (3.47 average).

The fourth question: Do you think there are disadvantages to using a feedback system such as Socrative?

Two participants did not pose an answer to this question. 114 (78%) participants selected *NO* while 29 (20%) participants selected *YES* for the same question. If it is analyzed according to gender; while 51 (68%) male participants marked *NO* only 23 (31%) marked *YES* out of 75 male participants. While 63 (89%) female participants selected *NO* only 6 (9%) selected *YES* out of 71 female participants.

Participants were asked to expand on their answers if their answer was *YES*. Just 8 out of 29 indicated the disadvantages of Socrative. Three were disqualified due to ambivalence. The other remarks regarding disadvantages were about technical issues, such as memory capacity of smartphones, the distractions inherent to smartphone use, and the fact that not everyone has a smartphone etc.

Table 1. The summary of the Student Survey on the use of Socrative

Using Socrative ...	Student Response
It is easy (or very easy) to use (Yes)	86%
Improved my engagement (Agree/Strongly Agree)	78%
Use it more (or significantly more) next semester	55%
There are no perceived disadvantages	78%

Table 1 was designed to reflect the results of the first research question. Four items from each of the four questions of the survey were chose to represent the attitudes of students.

Table 1 indicates that 86% of participants found Socrative easy to use, 78% of thought that Socrative improved their engagement, and 78% did not perceive any disadvantages. However, considering these findings, only 55% of participants wanted to use it more next semester.

B. Do the attitudes differ across gender?

To reveal the difference of attitudes towards the Socrative according to gender variable, inferential statistics was used. Independent sample t-test was conducted to determine the difference between the attitudes of male and female students. Levene’s test results show that there was no difference between the variances of the scores of the two groups. It means t-test, whose results are shown in Table 2, can safely be conducted.

Table 2. t- test results

<u>Levene's Test for Equality of Variances</u>		<u>t-test for Equality of Means</u>					
	Sig.	t	df	p	Mean Difference	Std. Error Difference	
	.184	.669	-.914	144	.362	-.949	1.034

($\alpha=0, 05$)

Table 2 indicates that there appear no statistically significant difference between the attitudes of male and female students ($t=-.914$ and $p>.05$). To get these results, students’ total scores on 2nd and 3rd questions were computed. The mean score attained by male and female students were 39.6 and 40.5 respectively. The mean difference (.95) was so small that statistically significant result was not observed.

Thus, though the results of descriptive statistics indicate a difference between the attitude of male and female students, the inferential statistics proved that this difference is not significant.

4. Conclusion

In this study, our fundamental aim was to reveal students’ attitudes towards the use of Socrative and the difference in their view according to gender. It is very important for an instructor to follow innovations in technological improvement and take advantage of appropriate applications to integrate into their classrooms. Only then will they be the kind of instructor who responds creatively to the limits of time and ensures students a better education. Our research indicates that Socrative is an appropriate tool that instructors can safely use in their English teaching classes to achieve better instruction.

The successful use of Socrative at our University and positive attitudes of students proves that Socrative, a student response system, facilitates teaching interactively in English language classes, and can be imitated and applied at other institutions.

The positive attitudes of students demonstrate that the claim that Socrative creates an active learning environment in class and helps enhance the learning process is, at least, correct for the participants of this study. Moreover, the statistically insignificant results between the attitudes of male and female students also indicate that Socrative can safely be used in classes without taking the gender differences into account.

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