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An action research on developing English speaking skills through asynchronous online learning

Hale Alkan [a], Nilay T. Bümen [b]*

[a] *Ege University, School of Foreign Languages, Izmir 35040, Turkey*

[b] *Ege University, Faculty of Education, Department of Educational Sciences, Izmir 35040, Turkey*

Abstract

This action research aims at developing an action plan to alleviate foreign language speaking anxiety, and accordingly improving speaking performance. The study, which is a collaborative action research type, was carried out of 19 prospective Chemical Engineering students at the CEFR-A1 level at Ege University School of Foreign Languages (EUSFL). The research took place over 12 weeks and the participants created WhatsApp groups; the researchers sent them written or voice messages with English speaking tasks; and they performed these tasks and sent their voice messages to their groups. Data were gathered through the Turkish form of Second Language Speaking Anxiety Scale (SLSAS) developed by Woodrow (2006), participants' speaking exam grades, and semi-structured interviews. The Wilcoxon signed-rank test elicited a statistically significant change in English speaking anxiety of students; that is, their anxiety level decreased. The students' speaking exam grade average was found 84.56% success rate. Also, the results obtained from the qualitative data matched with the results of the quantitative data indicating that the asynchronous online English speaking group (AOESG) worked well to alleviate students' English speaking anxiety and to enhance their speaking performance.

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Keywords: Preparatory class at the university; foreign language speaking anxiety; English speaking skills; asynchronous learning; mobile-assisted language learning

1. Introduction

1.1. Background of the Study

Knowing a language is frequently identified with speaking that language. Since the ultimate purpose of learning a foreign language is to communicate through information exchange (Mahripah, 2014), it is stated that language learners value speaking skills more. However, lots of students in Turkey state that they understand, yet cannot speak English. One of the reasons for this is thought to be a foreign language speaking anxiety. Minghe and Yuan (2013) name anxiety as the biggest affective factor that complicates

* Corresponding author Nilay T. Bümen. Tel.: +90-232 343 4000 – 5262, ORCID: https://orcid.org/0000-0003-1891-6589
E-mail address: nilay.bumen@ege.edu.tr

the foreign language learning process, and they state that "the most anxiety-provoking activity is speaking in front of others" (p. 50). Within this context, asynchronous online learning shines out as an effective way of developing speaking skills because it can minimize the problems encountered in a language class and alleviate English speaking anxiety.

Asynchronous online learning is a flexible way of learning because it facilitates access to learning materials anytime, anywhere; it allows the learners to contribute to the activities until they feel ready; and it forms a basis for the students who tend to be shy and keep quiet in class to state their ideas in a more democratic platform (Kung-Ming & Khoon-Seng, 2009). Besides, it promotes student participation since it enables multidirectional communication, meets the need for socializing by hearing voices peers', is relatively easy, facilitates expressing an opinion and responding to others, makes communication healthier by adding emotion to the message sent, and decreases the risk of getting misunderstood (Hew & Cheung, 2012). It is considered that all these advantages play a significant role in alleviating students' speaking anxiety as "asynchronous computer-mediated communication threatens less, allows students to learn at their own pace, enables self-reflection and provides more feedback" (Gleason & Suvorov, 2011, pp. 1-2).

1.2. Aim of the study

Based on the professional experience of the first researcher of this research, the most difficult skill to improve at English preparatory (prep) schools of universities is English speaking skills. Also, speaking anxiety is one of the most important problems observed in the language class. This is why the Asynchronous Online English Speaking Group (AOESG) is thought to familiarize students with their voice in English and help them practice more without peer pressure in class. Therefore, the purpose of this research is to develop an action plan to alleviate foreign language speaking anxiety, a challenging issue for prep students, and accordingly to improve speaking performance. In this study, the researchers sought answers to the following questions:

1. According to the measurements done before and after the implementation of the action plan, is there a statistically significant difference between the participants' English speaking anxiety level?
2. According to the measurement done after the implementation, what is the success percentage of the participants in the speaking skills exam?
3. What do the participants think about the AOESG?

This research is considered important because most students have a chance to practice English in only English speaking classes, yet class sizes are usually big, and periods are usually few (Sun, 2009). The AOESG is a co-curricular activity; thus, it is thought to enable the participants that cannot get many opportunities in the classroom to practice and form a basis to improve English speaking skills in a relatively controlled atmosphere.

Also, there are lots of studies focusing on asynchronous online learning to alleviate speaking anxiety (i.e. Bakar, Latiff & Hamat, 2013; Gleason & Suvorov, 2011; McNeil, 2014; Pop, Tomuletiu & David, 2011; Poza, 2011; Sun, 2009; Tallon, 2009). However, there is no action research on this topic in Turkey. This is why this research puts a Turkish perspective on the relationship between foreign language speaking anxiety and performance.

Moreover, the fact that there are lots of studies on foreign language speaking anxiety (Atas, 2015; Baş, 2014; Çağatay, 2015; Han & Keskin, 2016; Hamzaoğlu, 2015; Koçak, 2010; Öztürk & Gürbüz, 2014; Tüm & Kunt, 2013; Yalçın & İnceçay, 2013) indicates that language learners in Turkey have high English speaking anxiety, and there is a need for this kind of studies. Hence, this action research is hoped to pave the way for the initiatives to decrease English speaking anxiety in English language teaching programs. Besides, this research is the first academic-based action research at the School of Foreign Languages, Ege University (EUSFL), so it is expected that this research will function as a professional development model for the other instructors and promote using action research to solve the problems in class.

1.3. Theoretical Framework and Literature Review

How individuals learn to speak in a foreign language and what variations are included in this process have been examined for so long. The characteristics of students and teachers, learning-teaching process, syllabus, and materials are some of the leading factors in speaking a foreign language. Mahripah (2014) classifies these factors into three different groups: linguistic factors (phonology, syntax, vocabulary and semantics, and so on), socio-cultural factors (circle and family history) and psychological factors (factors that form personality such as motivation, anxiety, self-esteem, shyness, risk-taking, empathy, extroversion). It is considered that both language learners' and teachers' awareness of these factors contribute to speaking proficiency, which is associated with foreign language learning success; and therefore improves speaking performance.

The literature review shows that several studies highlight a negative correlation between foreign language speaking anxiety and performance (Chen, 2015; Hewitt & Stephenson, 2012; Horwitz, 1986; Suleimenova, 2013; Woodrow, 2006). McIntyre (1999) stated that anxiety is one of the most important predictors of foreign language success. In these studies, it was also found that the more anxious especially the low-achievers who want to perform well in the target language are, the lower their speaking performance is. The ones who are more enthusiastic about and have a positive attitude towards speaking in foreign languages tend to show better performance. Besides, the reasons for English speaking anxiety have been considerably examined (Juhana, 2012; Rafada & Madini, 2017; Woodrow, 2006). These studies conclude that the following factors increase foreign language speaking anxiety: having to perform speaking in class or at an exam; making mistakes, being mocked and consequently having the fear of negative evaluation; problems with grammar, vocabulary, and pronunciation; not being allowed to use L1 in class and speaking with native speakers. To eliminate these factors,

asynchronous learning appears to be a reasonable solution for developing speaking skills, and there are lots of studies that touch upon the relationship between asynchronous learning and foreign language speaking anxiety and/or performance.

In one of these studies, it was determined that the speaking performance of the students who attended out-of-class German-speaking activities on a smartphone application increased (Schenker & Kraemer, 2017). McNeil (2014) reached the conclusion that in an asynchronous computer-mediated oral communication environment, listening to the recordings of peers, again and again, to understand them and using resources to reply have a strong connection with the decrease in foreign language anxiety. Bakar, Latiff, and Hamat (2013) determined that the asynchronous online discussion group has a positive effect on developing speaking skills of low proficient students. Pop, Tomuletiu, and David (2011) concluded that asynchronous English speaking activities decrease students' anxiety and increase their self-esteem and attitude towards speaking significantly. In another study, the students studying Spanish at university were observed to decrease anxiety and fear of negative evaluation and to spend more effort producing the language when they used an asynchronous communication platform (Poza, 2011). It was also determined that integrating the use of voice blogs into second language speaking class increased motivation and chances to practice and enabled students to recognize themselves and develop learning strategies (Sun, 2009). The fact that computer-mediated communication could decrease anxiety was determined in another study, as well (Tallon, 2009). All these studies highlight that e-learning is effective in decreasing speaking anxiety and increasing performance.

Smartphones are tailor-made for e-learning since they are easy to carry and able to connect to the internet. Joining the e-learning process using a smartphone is actually joining m-learning (mobile learning), which is the portable version of e-learning. M-learning is becoming widespread because it offers numerous practicalities in language learning. Moreover, the speaking feature of m-learning is quite important as it enables speakers to listen to themselves after recording their voice (Miangah & Nezarat, 2012).

In the studies conducted in Turkey, the effects of WhatsApp (Han & Keskin, 2016), podcasts (Hamzaoğlu, 2015), online tools (Sağlam, 2014), or text and voice chat (Özdener & Satar, 2008) on speaking anxiety and performance were examined. Therefore, it was determined that technology-supported applications decrease English speaking anxiety, increase participation and speaking performance, and give a chance to practice and revise. However, this research is believed to fill a gap in the Turkish literature because there is no action research conducted with A1 level students at a prep school in Turkey.

2. Method

2.1. Research design

In this study, the authors decided to use collaborative action research because they aimed at finding a solution to the first researcher's students' problem. Collaborative action research has been defined "both as university and school researchers partnering for action research and as a team of practitioners doing independent action research" (Gordon & Solis, 2018, p. 2). Adams and Townsend (2014) stated that collaborative action

research if conducted well has significant benefits on the individual, team, and school levels and can further lead students to improve their learning.

2.2. Participants

The first researcher had 28 prospective Chemical Engineering students at the A1 level at EUSFL in the fall term of the 2015-2016 academic year. Their language level was determined by the placement test conducted at the beginning of the term. Chemical Engineering is an English-medium department at Ege University; and therefore, these students need to be proficient at English language skills to be successful in their major. The students all volunteered to take part in the research, but 19 students aged 17-24 were able to complete the asynchronous learning process.

2.3. Action Plan

The research started on September 28, 2015, and finished on January 6, 2016 (12 weeks). Before starting the AOESG activities, the students were informed about the research and applied the Second Language Speaking Anxiety Scale (SLSAS) as a pretest. They then were informed about the action plan in detail and given the plan on November 9, 2015. Their questions about the process were responded, and they signed an informed consent form. As for the themes of activities, they were chosen from the books Speak Now 1 and 2 used in the listening and speaking lesson because the students were thought to have sufficient vocabulary and grammar to talk about these themes. All the activities were parallel with the ones in the speaking exam at prep school, and they were compatible with technology because the participants used WhatsApp to do the activities. They created six WhatsApp groups with the peers they chose. There were four-five students in each group, yet these numbers changed in the process. They either directly used WhatsApp to record their voice or used another voice recorder and sent it to their WhatsApp group. And, they were expected to respond to the tasks by speaking English as long as they could. The activities were usually sent in the lunch break, and the students were asked to finish the related activity before the next one was sent. Visuals were used, or only voice/written instructions were given in the activities. There were three activities (on Monday, Wednesday, and Friday) for the first six weeks. Yet, because of the midterm, the second activity in Week 4 was canceled. For the last three weeks, the students were given only two activities (on Monday and Wednesday) based on their feedback on decreasing the number of activities. They were expected to do individual speaking tasks for the first six weeks and also paired ones for the last three weeks to get ready for the speaking exam. To do these paired activities, they came together with their exam partners, recorded their voice, and sent it to their group. The first researcher transcribed the participants' speech and used the Speaking Assessment Rubric (Appendix A) of EUSFL to give them written feedback on their performance on WhatsApp after every

three weeks. To get feedback on the activities, the students were sent an evaluation template based on Edward de Bono's (1982) PMI (plus, minus, interesting) model on WhatsApp and asked to send their feedback to the first researcher directly on WhatsApp. Therefore, they had a chance to evaluate the positive, negative, and interesting parts of the activities. They also gave ideas for change, which made the process more student-centered. When the activities finished, the SLSAS was applied as a posttest on January 11-15, 2016. In the week before the speaking exam, six students were interviewed to give their opinion on the AOESG. The activities in the AOESG can be seen in Table 1.

Table 1. Activities in the AOESG

Weeks	Themes	Activities			Evaluation
1		SLSAS (pretest)			
2	Friends	Description	Comparing and making a decision (CMD)	Discussion	PMI
3	Family	Description	CMD	Discussion	PMI
4	Daily Life	Description	CMD	Discussion	PMI
		Feedback to participants			
5	Hometown	Description	-	Discussion	PMI
6	Past	Description	CMD	Discussion	PMI
7	Future	Description	CMD	Discussion	PMI
		Feedback to participants			
8	Shopping	Description	CMD		PMI
9	Interests	Description	CMD		(Evaluation of the activities for the last three weeks)
10	Jobs	Description	CMD		
		Feedback to participants			
11	-	SLSAS (posttest) Interview with six participants			
12	-	Second speaking exam			

2.4. Data Collection and Instruments

In this study, both qualitative and quantitative data were gathered to ensure triangulation (Johnson, 2014); therefore, the students were applied to the SLSAS, their speaking exam scores were examined, and semi-structured interviews were held.

2.4.1. Second language speaking anxiety scale (SLSAS)

The SLSAS developed by Woodrow (2006) is a Likert-type scale with twelve items. The respondents are expected to choose the best option among *not at all anxious* (1), *slightly anxious* (2), *moderately anxious* (3), *very anxious* (4), and *extremely anxious* (5) when they speak English in twelve specified situations. In this research, the SLSAS was adapted into Turkish to measure English speaking anxiety of the students as the participants

were at CEFR A1 level. Before deciding to use it, a psychological consultant was called upon to express an opinion on whether the scale really measures anxiety or not. Then Dr. Lindy Woodrow's permission was granted via e-mail. Then ten English language specialists and one Turkish language specialist worked to ensure linguistic equivalence. A correlation analysis was done to quantify that. Therefore, a group of proficient students at both English and Turkish at EUSFL was chosen with the support of their instructors using convenience sampling. They were informed about the purpose of the research, and the volunteers were asked to provide their personal information, which did not appear in the research due to ethical concerns. The original scale was applied online on April 15 (n=80) and the Turkish form on May 3, 2015 (n=54) in the pilot process. The results show that there is a positive significant correlation between the original scale and the Turkish form ($r = .882$; $p < .01$).

After ensuring linguistic equivalence, confirmatory factor analysis was done using LISREL 8.71 statistical program based on the 455 students studying English at the CEFR-B1 level at EUSFL on May 20-22, 2015. The values can be seen in Table 2.

Table 2. The SLSAS values after CFA (n=455)

Fit index	Acceptable fit	Perfect fit	The scale values
NFI	≥.90	≥.95	0.96
NNFI	≥.90	≥.95	0.96
IFI	≥.90	≥.95	0.97
RFI	≥.90	≥.95	0.95
CFI	≥.95	≥.97	0.97
GFI	≥.85	≥.90	0.93
AGFI	≥.85	≥.90	0.89
RMR	≤.050	≤.080	0.069
RMSEA	≤.050	≤.080	0.084
X^2 /sd	≤ 5	≤ 3	4.24

As fit indices provided by Marcholudis & Schumacher (2007) and cited by Seçer (2015) in Table 2 are examined, the values indicate that the model tested is confirmed; and therefore, the scale has a model fit. X^2/df is 4.24, and this refers to a moderate fit, which is acceptable (Çokluk, Şekercioğlu & Büyüköztürk, 2012).

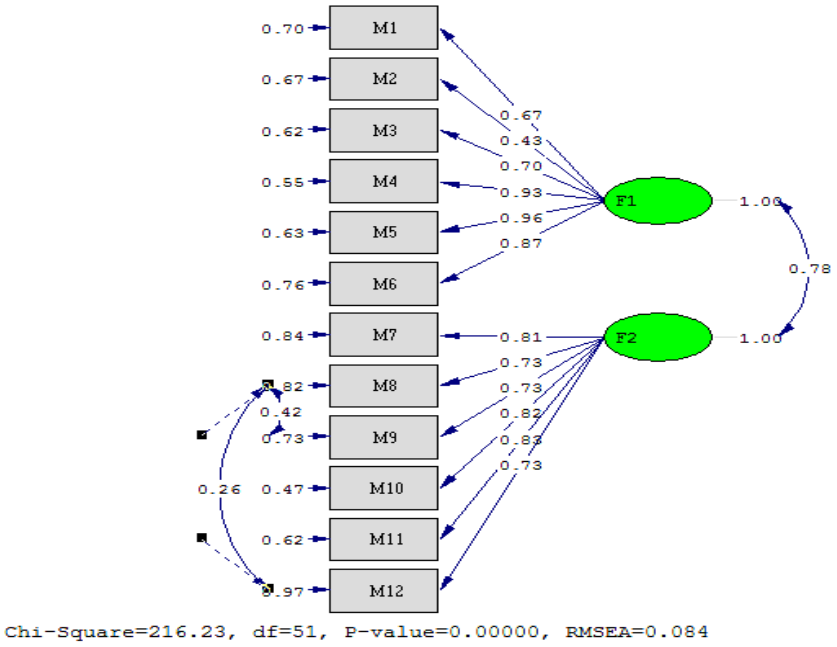

Figure 1. Confirmatory Factor Analysis Path Diagram of the SLSAS

As presented in Figure 1, the Turkish form is divided into two sub-dimensions as in the original form. Factor loading values of the scale range from .43 to .96, indicating they are at the desired level. Reliability coefficients regarding the factors of the scale were calculated to be .83 for in-class speaking anxiety and .85 for out-of-class speaking anxiety. Consequently, the values obtained from the confirmatory factor analysis show that the Turkish form of SLSAS can be used to measure English speaking anxiety levels of students learning English at prep schools.

2.4.2. Exam scores

To determine how the AOESG contributed to speaking performance, the students' second exam scores in the fall semester dated January 18, 2016, were analyzed. Since the only rater in the first speaking exam was the first researcher, these scores were not included in the scope of the research. However, there were three raters including the first researcher in the second exam to evaluate the students. The rubric can be seen in Appendix A.

The above-mentioned exam was prepared by the two instructors trained in the testing field and checked by the two others with the same qualification in EUSFL. The speaking assessment rubric was both used in the first exam and the mock exam before the second one. It was revised thereafter. Besides, because the themes in the exam were similar to

the ones in the lesson, and a mock exam was set before, the students were familiar with the exam content and evaluation process. The reliability of the three raters' assessment was maintained through interrater reliability. The results can be seen in Table 3.

Table 3. Interrater Reliability Analysis

	In-class correlation coefficient	%95 confidence interval	
		Lower bound	Upper bound
Single measures	.831	.669	.926
Average measures	.937	.858	.974

As seen in Table 3, the in-class correlation coefficient is .937, which refers to the perfect agreement (Cicchetti & Sparrow, 1981). This is why the scores given by the three raters are said to be very reliable.

2.4.3. Interview form

A semi-structured interview form was used to learn the participants' ideas about the AOESG. This form was prepared after a detailed literature review of how to prepare effective qualitative interview questions (Johnson, 2014; Yıldırım & Şimşek, 2013; Bogdan & Biklen, 1998), and the questions were submitted to expert opinion. The experts were the professors and English instructors working at Ege University. Pilot interviews were conducted with the two participants, the questions were tested, and the form was revised and made ready for use. There were also alternative questions in the interview form, and the questions were detailed using probes.

Six students were selected using maximum variation sampling after applying the SLSAS as a pretest and interviewed individually. According to the results, there were two slightly, six moderately and eleven very anxious students. Two students from each group (with a higher level of anxiety) were interviewed. The semi-structured interviews were conducted at the end of the asynchronous learning process, after the application of the SLSAS as a posttest and a week before the second speaking exam in the week January 11-15, 2016. The reason for this was to make sure participants did not get affected by their exam performance while communicating their ideas about the speaking group.

2.5. Data analysis

SPSS 16.0 was used to analyze the quantitative data. Wilcoxon Signed Rank Test was done to determine the effect of AOESG on the participants' speaking anxiety. "The Wilcoxon signed-rank test is the nonparametric equivalent of the t-test for dependent samples" (Büyüköztürk, Çokluk & Köklü, 2013, p. 215). There were 19 participants whose English speaking anxiety levels were determined before and after the

implementation of the action plan. Due to this small sample size, this test was thought to serve the research purpose. Also, the students' success rate in the speaking exam was calculated to determine the effect of AOESG on their performance. These students were assessed by three raters, and interrater reliability was calculated.

Content analysis was conducted to analyze qualitative data, and the interviews were analyzed inductively. The participants were reminded of the purpose of the research before each interview and told that their identities would be kept confidential. Using a voice recorder with their approval prevented data loss. All the interviews were made in the same classroom after the classes were over. None of them were interrupted. Qualitative data analysis started with the transcription of the recordings. Later, the data set were read three times uninterruptedly and at least ten more times at intervals. Before identifying the themes and codes, the literature was reviewed in detail, themes and codes list was formed, and this list was continuously renewed.

Data triangulation was used to check and establish validity. After the interviews, the transcriptions were sent to the participants for confirmation to ensure the correctness of their comments. Besides, the thick description was employed while writing the findings. The participants' names were not used but coded as P1, P2, and so on in the transcriptions and reporting for ethical reasons. The researchers made sure that the codes were keeping their meaning to establish reliability.

2.6 *Role of the researchers*

The first researcher had been teaching English for more than nine years at the time of the research. She thought that one of the biggest problems in developing English speaking skills was speaking anxiety. Therefore, she embraced the idea that the AOESG would help students get used to hearing their voice in English and facilitate practicing English speaking skills without in-class pressure. The second researcher is a professor of Curriculum and Instruction, and she mentored many theses in English language teaching. As for English speaking anxiety, she encouraged the first researcher to use action research to find a solution to her students' speaking problem.

Also, it is considered important for the researchers to be a part of the institution in action and teacher research since the research is usually the beginning of a longer, change-oriented process (Glesne, 2013). The first researcher conducted this research in the institution she worked, in other words, in her own "backyard". Although this facilitated the adaptation process of the SLSAS, this brought along some ethical concerns. Therefore, she informed all the participants about the research and got them to sign an informed consent form. Also, the researchers left their personal bias aside during data analysis and activated their subjectivity when interpreting the results. They transcribed the interviews and shared the documents with the participants to provide confirmation.

3. Results

The first research question was "According to the measurements done before and after the implementation of the action plan, is there a statistically significant difference between the participants' English speaking anxiety level?" The results of the Wilcoxon signed-rank test based on the pretest and posttest scores of the SLSAS show that the action plan elicited a statistically significant difference in English speaking anxiety (z = -2.660, p= .008). When the mean rank and sum of ranks are taken into consideration, the difference observed is in favor of negative ranks, which is the pretest score (Table 4). Besides, the effect size is .84 ($r=z/\sqrt{n}$), which Cohen (1988) defined as large (Büyüköztürk, Çokluk & Köklü, 2013). These findings indicate that the action plan worked well to alleviate the participants' English speaking anxiety.

Table 4. The results of the Wilcoxon signed-rank test (n=19)

Posttest–pretest	n	Mean Rank	Sum of Ranks	*z*	*p*	*r*
Negative Ranks	15	10.73	161.00	-2.660*	.008	-.84
Positive Ranks	4	7.25	29.00			
Ties	0					
Total	19					

*Based on positive ranks

The second research question was "According to the measurement done after the implementation, what is the success percentage of the participants in the speaking skills exam?" To answer this question, the students were evaluated by three raters based on the Speaking Assessment Rubric. The students' average speaking skills score was 12.68 out of 15, and their success percentage was 84.56%. The raters' scoring can be seen in Appendix B. This shows that the action plan contributed to speaking performance.

The third question was "What do the participants think about the AOESG?" To answer this question, semi-structured interviews were carried out with six participants who volunteered to participate. The interview questions made it possible to study the speaking group under three themes: objectives, content, and learning-teaching process. The themes-categories-codes list can be seen in Appendix C. The categories are written in italics in the reporting.

Firstly, *cognitive*, *affective,* and *psycho-motor objectives* were reached under the theme of objectives. The cognitive objectives were distinguishing English speaking skills from the other skills and organizing English speaking around the main topic. P1 especially mentioned the difference between grammar and speaking skills saying "*When I speak, if I start to think about grammar, I can't speak … I've seen that even if one's grammar is no good, they can express themselves by speaking*." P1 also stated the group helped him/her organize English speaking saying "*When we were kids, we learned the question 'What's your job?'... Now, after asking this question, I can ask 'What else would you like to be? Why?' I think all these things are in the speaking thing [group]*".

The affective ones were feeling less anxious while speaking English, being motivated to speak English, loving English, and getting used to hearing oneself speaking English. P2 talked about the decrease in his/her speaking anxiety saying *"At first, I was trying to do [the exercises] when I was alone in the room. Now it doesn't matter even if they [my roommates] are in…Now I am less anxious… it's like I've gotten used to it [speaking English]. Even if I can't piece together [what I want to say], I say it is OK*." P2 also thought that s/he found the group motivating and said "*The most successful part [of the group] was motivating us to speak because we have been really trying to speak, learning new words. Sometimes I ask myself how I can say something [in English] in the lesson… [The group] also encourages us to speak English outside the classroom*." P1 held the idea that the students who practiced English only in the group might love English thanks to the group saying *"Some students in the classroom only listen to the lesson, study lesson and do your exercises. If they didn't do your activities, for instance, I don't think that they would feel closer towards English.*" P3 said "*I started to get used to my English voice… because at first, I listened, listened but couldn't send [my recording] to the group… I read again and again... to make it better. I got used to it in time."*

The psychomotor one was increasing English speaking performance. P2 stated that *"I normally didn't do that much research, but here [in the group] I say that a word doesn't fit and look up in a dictionary. For example, I don't know a [grammar] topic and use some books to learn how to use it… That's why this activity improves us*." P4 expressed that *"I used to think in Turkish and translate the sentence into English at first. Now I've realized that I started to think in English."*

Secondly, the first category was *topics* under the theme of the content. While the participants felt positive about taking a chance to speak about familiar topics, it was found that their individual differences shaped their views about the topics, and they could not speak enough about the ones they found difficult. P1 stated that *"[the best thing about the group was that] the topics were about daily conversations. They weren't randomly chosen, I think*." And P2 mentioned that "*The topics we talked about in the group were related to the ones covered in the lesson, so we had a chance to reinforce them. I mean because we didn't cover so different topics, both we reinforced the lesson and that helped us in the exam."* Also, P3 mentioned a negative side of the topics because of his/her individual difference saying that *"Some of the activities you provided … required us to have general knowledge. For instance, we needed to do some research about a country … because I felt incompetent about such topics, I had a difficult time doing that."*

The other category was the *duration.* The duration of the activities in the speaking group was found adequate, yet the frequency and the possibility of grading them might affect student participation and motivation. P4 stated that *"If the activities are graded, [the group should last for] the academic year. If not, we could have done them once a week, and this could have lasted longer."*

Finally, under the theme of the learning-teaching process, five categories were reached: *activities*, *tool*, *timing*, *participation,* and *feedback*. The fact that the speaking activities were parallel with the ones in the exam was welcomed, and revising the types of activities based on the participants' feedback was important. P4 mentioned that "*The best part [of the activities] was working… together through the end… That led us to know*

our partner. For example, we know how he/she will react to what [in the speaking exam] because we talked to each other before the exam." Also, the tool used in the research called WhatsApp was liked due to its features. P3 said that *"WhatsApp is the most available for now, I think… It is good for sending voices, pictures, text messages."*

Also, the timing of the activities was asynchronous, which was thought to be positive because this gave flexibility to the participants. However, asynchronous activities made it impossible to create a platform for discussion, and the participants did not have to record their voice in one sitting. Therefore, there was a need for synchronous activities that would be complementary to the asynchronous ones to develop speaking skills. P1 mentioned that *"They [the activities] could be done at specific times… if it had been this way… it could have been different… more positive."* Moreover, P4 said that asynchronous activities caused some individual negative situations. S/he stated that *"The negative part actually stemmed from us: not recording our voice in one sitting. I realized once that [while recording my voice] I had said a sentence and paused the recording… Then I stopped doing that.*" Unlike her/his peers, P6 stated that *"It is more comfortable like this [asynchronously]. We do it in our free time. Sometimes we can't find a mutual time [to do the activities]."*

Besides, the number of participants and their individual differences in each group affected their participation. P3 stated that *"I felt sorry when not many people participated [in the activities] at first. When the friends in the group didn't show enough interest. It affects one's motivation a lot."* P3 also stated that sometimes s/he read from the papers while recording her/his voice because of "lack of self-reliance". S/he said that *"I can't think well at that time. I think it would have been better…to making the activity better. Or in order not to lose face in case, my friends listen.*" P5 mentioned as the reason for doing the activities that *"I thought it would improve me… It would be absolutely effective for my career… I also needed that."*

Although this research required voluntary participation, some participants also suggested involving AOESG in the curriculum based on compulsory participation. P2 stated that *"If we want to contribute [to our lives], I think we should join. But if it's graded, I mean when it's compulsory, we don't have the itch to do it, I guess."* Unlike P2, P5 mentioned that "*It works if it's compulsory because… if it's not, we know that nothing happens when we don't do it.*"

Moreover, determining the variety and frequency of feedback according to the participants' features was thought to be necessary. P1 said that *"I think I would like to do it [feedback session] face-to-face to open up the student more… I think I would try to meet the student individually as much as possible… There are students like me."* Both the researcher's and participants' feedback were considered significant to foster student-centered learning. There are different views on the researcher's giving the participants feedback once every three weeks. P2 said that *"It is not easy to understand how much we have improved doing three activities in a week… That's why it is good you gave us feedback once every three weeks.*" However, P6 mentioned that *"It could have been better in individual terms if you had given us weekly feedback. Sometimes I realize I have used some structures wrongly, after listening [to the recording] two or three times…My peers don't realize them [my mistakes], either. You may realize them."* Also, the weekly feedback

gotten from the participants has positive reflections to make the process more student-centered. P2 said that *"It's good you got weekly feedback [from us] because I think if something has a negative side in that week, you don't do it in the next week."*

4. Discussion

The AOESG helped the participants' speaking anxiety decrease and their speaking performance increase, asynchronous learning was found flexible, although supporting it with synchronous learning was thought to be a good idea, interaction among stakeholders played an important role in the learning process, motivation was an important factor to participate in the activities, creating a student-centered environment was necessary, and getting feedback from the researcher was essential to keep track of the development of speaking skills. These findings indicate that the action plan might serve the purpose of alleviating English speaking anxiety and increasing English speaking performance.

The results of this research match the results of some studies in the literature. For instance, the results of studies indicating that asynchronous speaking activities facilitate speaking with self-confidence, and therefore decrease anxiety (Sağlam, 2014), electronic environment decreases speaking anxiety because it decreases fear of negative evaluation (Poza, 2011), computer-mediated communication reduces foreign language speaking anxiety (Tallon, 2009; Özdener & Satar, 2008) bear similarities to the results of this study. Since the participants prepared voice messages in English in addition to the in-class speaking activities, their motivation to speak increased as in Sun's (2009) study, and their self-confidence boosted, while their fear of making mistakes decreased as in Hamzaoğlu's (2015) study. Furthermore, as in Miangah & Nezarat's (2012) study, the participants had the opportunity to get familiar with their voice in English because they were able to listen to their recordings before and after they sent them to their groups, which helped decrease speaking anxiety. Pop, Tomuletiu & David (2011) mention that anxiety decreases in a safe environment where speakers address themselves to an audience. This suggests that although there was not a suitable discussion environment in the groups due to asynchronicity, which was found negative by both the researchers and participants, asynchronous activities were one of the factors contributing to the alleviation of speaking anxiety. In short, the starting point of this research was English speaking anxiety like some other studies conducted in Turkey to develop foreign language skills (Atas, 2015; Baş, 2014; Çağatay, 2015; Han & Keskin, 2016; Hamzaoğlu, 2015; Koçak, 2010; Öztürk & Gürbüz, 2014; Tüm & Kunt, 2013; Yalçın & İnceçay, 2013), which indicates that foreign language learners in Turkey have high speaking anxiety.

There are so many studies determining asynchronous speaking activities increase speaking performance (Akkaya-Önal, 2015; Andújar-Vaca & Cruz-Martínez, 2017; Bakar, Latiff & Hamat, 2013; Schenker & Kraemer, 2017; Han & Keskin, 2016; Hamzaoğlu, 2015; Özdener & Satar, 2008; Poza, 2011; Sağlam, 2014). Schenker and Kraemer (2017) and Sağlam (2014) stated that asynchronous learning allows practicing and revising; McNeil (2014) mentioned that the increase in the use of resources is related to the increase in foreign-language performance. In this research, asynchronous online

activities both helped the students reinforce what they learned in the classroom and increased their performance since they used multiple resources to do the activities.

Asynchronous activities give learners flexibility (Jethro, et al., 2012) as in this research. As the participants used WhatsApp, they were not limited in terms of time and location. Although they found WhatsApp satisfying and useful to develop speaking skills because of its services and user-friendliness, some other studies are indicating that participants perceive using technology as a less effective way to develop second language speaking skills after they use it (Gleason & Suvorov, 2011). Even though asynchronous online activities made it possible for the researcher to know her students better and interact with them apart from class, her having to be available all the time on WhatsApp to carry the activities out of working hours imposed a great burden on her as in Bouhnik and Deshen's study (2014).

It is stated that participants can increase interaction with their peers in asynchronous speaking groups (Gleason & Suvorov, 2011; Poza, 2011), and the students who can listen to their own and their peers' voice feel motivated to develop their language skills (Pop, Tomuletiu & David, 2011). However, in this research, the participants avoided communicating in the asynchronous platform as in another study (Vonderwell, 2003), even though they all knew each other. They either sent their voice recordings but made no comment on their peers' and therefore involved in almost unilateral communication as in Chou's (2002) study. Besides, that some of the participants recorded their voice with no one around, or tended to read from their notes to make the recording when they felt anxious indicates that peer effect and fear of negative evaluation have an impact on foreign language speaking anxiety in the Turkish literature (Baş, 2014; Öztürk & Gürbüz, 2014) as well as in the international one (Juhana, 2012; Rafada & Madini, 2017).

It is suggested that the number of participants in an asynchronous learning group should be limited to 20 to facilitate interaction (Romiszowski & Mason, 2004). In another study, it is highlighted that having 10 participants in a group eliminates the burden on the researcher who wants to give individualized feedback (Hsu, Wang & Comac, 2008). Hence, the participants were asked to form groups of five on average with their close peers to be able to interact more in this study. Working with close peers was thought to contribute to the alleviation of speaking anxiety because some studies are showing that the participants who do not know each other feel uncomfortable during interaction (Vonderwell, 2003). Moreover, both the participants' language skills affected their speaking performance and their individual features affected their participation in the activities, although learners' individual features, their pace of learning, motivation and language competency, which cause inequality in a speaking class, are said to be eliminated in a digital environment (Pop, Tomuletiu & David, 2011). Also, it was found that different strategies should be used to motivate the participants and enrich learning outcomes as in Hsu et.al's (2008) study.

Researcher's feedback is said to help improve participants' performance (Romiszowski & Mason, 2004; Sağlam, 2014; White, 2003). In this research, the first researcher gave the participants written feedback. However, giving voiced feedback to the participants in especially asynchronous online environments is thought to be more personal and triggers

the participants' sense of existence (Ice, Curtis, Phillips & Wells, 2007; Olesova, Richardson, Weasenforth & Meloni, 2011). Ice et al. (2007) assert that voiced feedback decreases the researcher's time spent on feedback, while it increases the quality of feedback. The fact that not giving feedback at the right time decreases motivation and affects the feeling of involvement, which affects learning outcomes a lot, is an issue encountered in this research, as well (Vonderwell, 2003). Besides, some studies highlight that in addition to the researcher's feedback, peer feedback facilitates participants' gaining control over asynchronous learning experience (White, 2003) and constructing the information in a cooperative way (Chou, 2002). In this research, the participants did not give feedback on one another's performance, though. As in some other studies in the literature (Han & Keskin, 2016; Hsu et al., 2008), the feedback gotten from the participants helped them self-reflect and shaped their learning experience in a student-centered way.

5. Conclusions

This action research helped decrease the students' English speaking anxiety and increase their performance. Also, asynchronous learning provided flexibility, interaction among stakeholders was important in the learning process, motivation played a determining role in participation, fostering student-centered learning was vital, and feedback from the researcher was indispensable to monitor the development of speaking skills. Briefly, the advantages of asynchronous online activities far outweigh the disadvantages in terms of developing English speaking skills. Keeping up with the changing technology is a must for the educational institutions that catch up with the times. Hence, integrating asynchronous online speaking activities into the curriculum of prep schools appears to be a significant alternative to improve English speaking skills outside the class.

6. Limitations and Future Research

This research was conducted on a small group of participants; therefore, it has some limitations. However, based on its results, several suggestions can be made for future research. Firstly, action research can be carried out with students at different proficiency levels, in different departments and schools, as well. Secondly, the study can be turned into quasi-experimental research. The students in the intervention group can use an asynchronous online learning method, or the activities can be done synchronously and asynchronously by two different groups. Which method is more effective in alleviating speaking anxiety can be examined. Also, research can be done on the roles of the researcher and participants or types of feedback in an asynchronous environment. Finally, international studies can be done to reveal the relationship between culture and foreign language speaking anxiety.

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Appendix A. Speaking assessment rubric

	Very good (3 pts)	Satisfactory (2 pts)	Needs improvement (1 pt)	No effective communication (1 pt); No attendance (0 pt)
Interaction	Understands all the instructions/questions with little or no support and completes the task successfully.	Understands most of the instructions/questions with support at times, but can complete the task.	Understands only some of the instructions/questions, and requires a lot of support, so communication breaks down.	
Spoken Grammar	Generally sufficient, level-appropriate and topic-related grammar to complete the task.	Frequent inaccuracies may arise, but attempts and manages to use mostly sufficient, level-appropriate, and topic-related grammatical structures.	Mostly incorrect, insufficient use of grammatical structures to complete the tasks.	
Vocabulary	Makes use of sufficient, level-appropriate, and topic-related vocabulary with little or no search for it.	Uses level-appropriate and topic-related vocabulary, but frequently repetitive.	Very limited range of vocabulary to express his/her ideas properly; mostly uses several isolated words and memorized phrases.	
Fluency & Coherence	Generally, responds promptly; fluent without hesitation. Responses are phrases or short sentences, not just one-word answers. Can use basic cohesive devices with ease.	Slow, hesitant and irregular speech at times, few unnatural pauses; but can continue. Uses basic cohesive devices with relative ease.	Very slow, stumbling speech; no extended utterances; delayed responses. Limited use of basic cohesive devices.	
Pronunciation	Generally clear pronunciation of sounds; his/her speech is understandable.	Unclear pronunciation of sounds at times, which does not interfere with communication.	Major problems with pronunciation of sounds most of the time; often unintelligible.	
Total	15 pts	10 pts	5 pts	

Appendix B. Students' speaking performance

Student	Rater 1	Rater 2	Rater 3
S1	15	15	15
S2	13	12	12
S3	12	12	12
S4	14	13	13
S5	15	14	13
S6	13	14	13
S7	15	15	15
S8	13	12	13
S9	13	13	11
S10	13	13	13
S11	13	14	14
S12	12	12	12
S13	14	13	12
S14	8	10	9
S15	13	13	13
S16	11	12	10
S17	15	14	13
S18	10	10	10
S19	13	13	12

Appendix C. Themes-categories-codes

1. Objectives
    a. Cognitive
        i. Distinguishing English speaking skills from the other skills
        ii. Organizing English speaking around the main topic
    b. Affective
        i. Feeling less anxious while speaking English
        ii. Being motivated to speak English
        iii. Loving English
        iv. Getting used to hearing oneself speaking English
    c. Psychomotor
        i. Increasing English speaking performance
2. Content
    a. Topics
    b. Duration
3. Learning-Teaching Process
    a. Activities
    b. Tool
    c. Timing

- i. Synchronous
- ii. Asynchronous

d. Participation
- i. Participants
  1. Number of participants
  2. Participants' individual features
- ii. Type of participation
  1. Voluntary
  2. Compulsory

e. Feedback
- i. Researcher's feedback
  1. Types of feedback
  2. Frequency of feedback
- ii. Participants' feedback

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