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Research Article

Enhancing critical thinking and English-speaking skills of gifted students through philosophy for children approach

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Abstract: This study aimed at investigating the effectiveness of "Philosophy for Children (P4C)" approach on the critical thinking and English-speaking skills of twenty-three 7th grade gifted students learning English as a foreign language at a Science and Art Center (SAC) in the city of Denizli, Türkiye. In the study a mixed methods research design was adopted with the participation of randomly assigned experimental and control groups. While quantitative data were collected through the Cornell Critical Thinking Test (CCTT) X level and the Cambridge English Speaking Test (A2 level for Schools), qualitative data were collected through reflective diaries written by the experimental group participants and evaluation forms. While the control group followed the usual SAC English speaking lessons, English speaking lessons for the experimental group were based on the P4C approach. According to the quantitative data findings, there was an increase in the scores of both groups in terms of speaking skills in English, however this difference was not statistically significant. In terms of critical-thinking skills, there was a slight decrease between the pre-test and post-test scores of the control group and an increase in the scores of the experimental group and this difference was statistically significant. In addition, the qualitative data revealed that the experimental group participants generally provided positive feedback on P4C practices and speaking lessons based on the P4C approach created positive effects on their critical thinking and speaking skills in English, while such an application did not create a significant effect on their speaking skills in English.

1. INTRODUCTION

Current trends in the globalized world and language learning field have highlighted the necessity of adapting the developments and integrating the innovations into English as a foreign language (EFL) classroom (Tosuncuoğlu, 2018). Thus, within the developments witnessed in education in the 21st century, the roles of language teachers cannot be considered limited to teaching only the linguistic aspects of a language or improving language proficiency of their students as they are also supposed to provide opportunities that can enable their students to gain 21st century skills such as questioning, reasoning or critical thinking (CT) and to express

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themselves to cope with the challenges they can encounter in their lives (Yang et al., 2005). It has therefore become indispensable for language learners to have such skills within learner-centered pedagogies unlike the traditional teaching methods where the teacher is the source of information and presents the content and where the students are passive receivers of information. Consequently, creating changes in EFL classrooms by implementing activities that enable the learners to use and improve CT skills provides contributions not only for a more effective language learning environment, but also for more independent, autonomous learners, and good thinkers (Yang & Gamble, 2013).

Gifted individuals who are the subject of the present study play a critical role in nations' future and their education has gained significance over the years. Although the issue has critical significance, research concerning to what extent special programs for the education of gifted individuals is effective is not crystal clear. The present study therefore attempts to provide contributions to have an understanding of the education of gifted students in an EFL context in Türkiye. Specifically, this present study attempts to investigate the effectiveness of Philosophy for Children (P4C) approach on English speaking and CT skills of 7th grade gifted students who studied at a Science and Art Center (SAC) in Denizli, Türkiye. To this end, the present study attempts to find out answers to the questions as follows: 1. Can P4C-enhanced English-speaking practices be effective in fostering critical thinking skills of gifted students?; 2. Can P4C-enhanced English-speaking practices be effective in fostering English speaking skills of gifted students?; and 3. What are the participating gifted students' opinions about P4C-enhanced English language speaking practices?

1.1. Critical Thinking

Critical thinking (CT) can be defined as the thinking process that enables the individuals to formulate and construct new knowledge through questioning, searching for reliable information, and asking relevant questions. From Lipman's (2003) point of view, CT is defined as involvement "in all responsible interpretation (the production of meaning), and all responsible translation (the preservation of meaning)" (as cited in McGregor, 2007, p. 192). Ennis (1987) defines CT as "reasonable, reflective thinking that is focused on deciding what to believe or do" (p. 10). In similar definitions, being a critical thinker requires using higher-level thinking skills such as analyzing, reasoning, making evaluation based on standards or proven evidence, and reaching reasonable and rational decisions (Facione, 2015; Kuhn, 2015).

The "Framework for 21st Century Learning" consists of "4Cs"; namely, "critical thinking, communication, collaboration, and creativity" (Zahrani & Elyas, 2017, p. 134). CT has been one of the crucial skills that provide contributions also to the language learning practices of learners by making them be involved in the interactive process of getting and reflecting on information through questioning, assessing, analyzing, and evaluating. As the language is the tool to communicate with people and express ideas or beliefs, the close relationship of using the language as a means of promoting CT becomes clear (Tosuncuoğlu, 2018). It is therefore possible for the language learners to use their CT skill in each of the language skills; namely, speaking, writing, listening, and reading. For instance, language learners can analyze the stance of a writer in a reading class, join a debate in a speaking class, question or criticize a story they watch in a listening/speaking class, and they can also express their opinions on a discussion/debate/video in a writing class. Thus, it can be seen that CT should not be taught as an isolated skill in a different class; however, it should be integrated into all language skills as a vital 21st skill that an individual should develop in our digital and globalized age.

At this point, teachers have a key role in acting as a facilitator to help the learners learn how to think critically by raising good questions, introducing the strategies they can use to become good thinkers, sustaining their motivation to think and reflect on the ideas and to collaborate, and having interaction with their peers. For language learning process, CT also has gained

significance when the close relationship between the use of language and the requirement of thinking critically within learner-centered methods has been taken into account (Yang & Gamble, 2013).

There have been some studies that search for alternative methods to enhance CT skills of EFL learners and focus on possible outcomes of CT in EFL classes. Davidson and Dunham (1997) investigated the effect of Ennis-Weir Critical Thinking practices to assess the CT progress of Japanese students in an experimental study. The researchers implemented a year of intensive academic English instruction with control and experimental groups. The control group was provided with only content-based intensive English instruction, while the treatment group received additional training in CT. The results demonstrated that the experimental group outperformed the control group significantly in the test which suggested that CT skills can be gained as part of academic EFL / ESL instruction. In another study, Yang and Gamble (2013) explored the effects of a course based on CT-integrated EFL instruction at a university in Taiwan on the English proficiency, CT, and academic achievement of the participants. The participants in the experimental group were involved in CT activities such as information literacy and critical reading (reading), critical reflection/sharing, article critique/peer feedback, debate (listening/speaking), argumentative writing, and peer critique with an emphasis on CT skills (writing). However, the control group received effective language learning practices by following the textbook without emphasizing CT activities. Both of the groups wrote essays about global warming as the final product and their essays were analyzed using the 'Holistic Critical Thinking Scoring Rubric' (HCTSR) to assess their CT skills. Quantitative data demonstrated that the experimental group scored significantly better than the control group did in both overall English proficiency and CT skills. As a result, it was found out that CTintegrated instruction created positive effects on English proficiency and academic achievement of the participants. Similarly, Báez (2004) aimed to investigate the effectiveness of an implementation designed on tasks which could enhance CT skills of 33 students in three groups in Colombia. The researcher examined meaning construction and meta-cognitive processes developed by the students, to what extent these kinds of tasks create an impact on interaction of the students, and the impact of this interaction on English proficiency of the students through CT - enhanced activities. The results of the study demonstrated that the students could make associations and interpretation with the help of their background knowledge, experiences, and beliefs and teacher's role is crucial in motivating the students to explore the depth of the texts. Furthermore, positive developments were observed thanks to the use of feedback, however sometimes there was asymmetry of interaction. In terms of language proficiency, the students showed improvement especially in their lexical and discursive competencies. Nevertheless, they needed support in terms of syntactic, socio-pragmatic, and strategic competence.

The impact of CT on writing skill was searched by Rashtchi and Khoshnevisan (2020), who presented reflections of the classroom practices of a writing class designed to foster CT skill (CT) in an EFL context in Iran as they introduced some sample tasks and provided suggestions on the ways of integrating CT skill into writing and thinking classes for the teachers in their study. Since writing skill requires good thinking and organization of the ideas, a process-based writing approach needed to be employed with the outlining, drafting, and revising steps. By paying attention to the important elements such as questioning, cooperation, and employing organizational skills, the writers provided some suggestions that could make writing classes more effective in a way to foster CT of the students. In the Turkish context, Tosuncuoğlu (2018) looked into the issue from the students' perspectives and investigated the awareness and knowledge of 79 undergraduate students of English Language and Literature Department at Karabük University, Türkiye about CT. In this study, research findings showed that students' awareness about thinking critically was not at a desirable level. As a result, an education program that serves to the contribution of CT improvement is suggested by the researcher. In

another study carried out with the participation of 34 undergraduate university students at Karadeniz Technical University, Türkiye, Arslan and Yıldız (2012) examined whether a literature-based critical-thinking program could create a positive impact on CT skills of students' and teachers' beliefs about the literature course. Within the treatment, the participants were encouraged to engage in dealing with various literary works and the CT activities were designed in a way that enabled the participants to practice the cognitive levels of Bloom's taxonomy. According to the results of the study, it was found out that there was a significant change in CT levels of the participants considering pre-test and post-test scores. The participating instructors also reported positive attitudes towards the implementation as it contributed to their professional development and made a more student-centered learning environment possible. The results of the study might be considered significant as it provides an example of how to integrate literature practices that can enhance CT skills into Turkish education system at tertiary level.

1.2. Philosophy for Children (P4C) Approach

The Philosophy for Children (P4C) approach has its roots from Socratic legacy which is based on reasoning as Socrates used his methods of questioning and dialogue to enhance good thinking skills of people (Chamberlain, 1993). P4C approach has therefore been considered as an effective way of improving thinking skills as well as emotional and social skills of especially gifted individuals (Sutcliffe, 2004) and has also been seen as a response to the needs of people who have to overcome the challenges and hardships in the 21st century.

P4C practices generally begin with the use of a stimulus which can be a story, a poem or a video that involves philosophically rich content or an object to take the attention and make pupils ask logical questions to start a discussion. Children are involved in a 'community of inquiry' in which they are encouraged to show respect to each other's ideas or opinions and to reflect more deeply than their usual ways. Moreover, children carry out discussions by expressing agreement or disagreement, making suggestions, realizing the various perspectives, creating a connection between the concepts and their own experiences or emotions. In this way, with the help of the constructed dialogues between them, the social aspect of the youngsters is also improved. The teacher in this environment acts as a facilitator but does not interrupt the youngsters' speech or direct them, does not express his/her opinion, or does not provide the answer in a short time when the youngsters do not have responses. The key point for the teacher is to first create a peaceful environment in which the youngsters feel comfortable to express their opinions or emotions and strange ideas are welcomed. In addition, the youngsters are encouraged to cooperate with each other rather than being involved in a competitive environment. In this way, they gain the opportunity of constructing the knowledge and concepts within a cooperative learning environment and enhance their discussion skills. The idea of designing EFL classes as not only language learning environments but also social interaction settings which favor thinking deeply and discussing on life issues was first proposed by Pishghadam (2011) in a seminal paper (Dabbagh & Noshadi, 2016). When language learners are exposed to philosophical questions related to different domains of their daily life, they have been observed to be more motivated to answer and participate in discussions or debates.

When the possible outcomes of the P4C approach are taken into consideration, there have been many studies that seek to find out the effectiveness of P4C in improving CT skills of the learners. Some of them were carried out in EFL contexts within the Philosophy-Based Language Teaching (PBLT) in order to investigate whether P4C can be an effective tool to improve CT and English proficiency or not. In a pioneering research, Shahini and Riazi (2011) carried out a study in EFL classrooms in Iran to assess the development of students' speaking, writing, and thinking skills. The experimental group was involved in practices in which the PBLT techniques such as asking alternative views, clarifications and reasons were used while

the control group was exposed to ordinary or non-philosophical questions. According to the results of the study, a significant difference was found between the experimental and control groups in speaking and writing skills. The results of the study showed that PBLT may be an effective tool to foster students' CT skills in an ELT context as it enables students to respect different views, explain concepts, apply reflective thinking, and think critically.

Based on the assumption that children have the potential to philosophize starting at an early age, Lam (2013) investigated whether Lipman's P4C approach could be effective in fostering CT skills of Chinese Secondary 1 students in Hong-Kong or not. During the treatment, P4C sessions were carried out by using the philosophical novel "Harry Stottlemeier's Discovery" (Lipman, 1982). After the sessions, the experimental group students were supposed to write on the My Thinking Log as a follow-up activity. The control group was exposed to the traditional language classes by using novels with a similar level without an emphasis on philosophy or reasoning. According to the results of the study it was found that the participants of the study who received philosophy-based instruction were found to have the capability of conducting debates, good thinking, reasoning, and reflective thinking abilities through the implementation of P4C approach and showed a greater performance in displaying CT and reasoning skills compared to that of the control group. In a more recent study, Lam (2020) also examined whether CT and English proficiency can be enhanced through philosophy in ESL classrooms or not. Employing the basic principles of P4C approach, the study was conducted based on a program called Philosophy in Schools (PIS). 62 Chinese secondary students from a school and 57 secondary students who used English as a second language from another school participated in the study. The results of the study supported the previous research which suggested that philosophy-based instruction can be an effective alternative to engage the individuals in a social community of inquiry by making them learn how to think, reason, question, and have interaction with their peers and develop their CT skills. The study also highlights the close relationship between the use of language and thinking skills by putting an emphasis on especially the speaking skill that plays a key role in cognitive development.

1.3. Improving English Speaking Skills

One of the main concerns of this study is to see the possible effects of implementing philosophyenhanced approach on English speaking skills of EFL learners. Speaking skill constitutes the basis of communication and also is the most difficult skill to be improved by foreign language learners (Oradee, 2012) as EFL learners generally have difficulties in expressing themselves orally and using the language for communicative purposes. It is highly possible that this stems from lack of exposure to real life situations through which they can have the opportunities of practicing and using the language as a response to their needs (Afrizal, 2015). In addition, they do not have the chance of having interaction with native speakers as a way to encounter cultural properties of the target language and improve their oral proficiency skills. As an alternative to create communicative language learning environments as much as possible under these conditions, investigations into the effects of various methods on speaking performance of the language learners have become a prevalent research concern. As Lipman (2003) states, discussions and also cooperative activities within P4C can enable the learners to use higherlevel skills, construct their own beliefs, and as a result strengthen their CT and reasoning abilities. As a vehicle to foster these skills, learners use the 'language' in expressing their opinions and getting feedback while they are involved in the community of inquiry. Thus, it has been clear that there is a close relationship between the use of language and philosophybased instruction.

As an alternative method, improving English speaking skills of EFL learners through philosophy-based language teaching approach has become a research concern recently (Dabbagh & Noshadi, 2016). There are some important key factors that should be taken into

consideration while implementing the P4C approach in language classes. The classrooms are considered as a 'community of inquiry' in which the members cooperate and discuss to find a solution to a common problem or accomplish a philosophical task. This component of P4C enables the students to take the responsibility of their own learning which contributes to their autonomy. Another component is that the students are involved in philosophical dialogues which refer to some problems that can be solved through deep thinking. The students can also use the language more effectively while expressing their opinions, gain analysis skills while coping with the challenges and problems, have persuading and communication skills when they express agreement or disagreement, support their ideas and try to convince their peers, learn to be more respectful towards different or extraordinary ideas or beliefs, and learn how to support their group partners or the other students to reach a consensus on a common problem (Rustam et al., 2018).

When the related literature is examined, it can be seen that various methods are used to enhance English speaking skills of the learners. While in some studies, the effects of conducting discussions or debates in the classroom on speaking skill of the learners were investigated, in some studies whether employing digital tools that may provide the opportunity of practicing speaking for the learners alone and prevent the anxiety of speaking in a community could be influential or not was studied by the researchers. One of the most directly related empirical studies with the present study was carried out by Rustam et al. (2018), who aimed to find out whether group-discussions within the philosophy-based language teaching approach (PBLT) can be an effective alternative to promote English oral proficiency of the undergraduate students in Indonesia or not. Data obtained in their study showed that implementation of PBLT approach in language classes provided contributions to English speaking proficiency and also to social and emotional development of the students. Moreover, students' attitudes towards English changed in the positive way and their motivation to participate in the discussions increased.

Using discussion or debate has been considered as one of the effective ways of improving speaking skills of the language learners. In this context, Afrizal (2015) investigated the effectiveness of classroom discussion on English speaking ability of students from Almuslim University in Kudus and found out that classroom discussion placed a positive impact on speaking performance of the participants. In the study, discussions were mentioned as methods that increased motivation of the students to express themselves orally, engaged the students in the learning process actively, and provided the opportunity of having interaction with their peers and teachers. A more recent study carried out by Haryanti et al. (2021) aimed to foster English oral fluency of 64 students at the 11th grade in Indonesia through Three Steps Interview Technique. Being one of the cooperative learning strategies, this technique is mentioned as a communicative activity carried out with an interlocutor by asking and answering questions and having discussions. Findings obtained in the study suggested that Three Steps Interview Technique is useful in improving students' speaking ability effectively. The positive outcomes of the treatment were considered to have stemmed from the fun atmosphere during the implementation of the technique and cooperation which led to an increase in students' motivation to express themselves orally. In the light of the studies, it can be stated that there have been numerous attempts to foster and facilitate speaking skills of the language learners in EFL or ESL contexts. Most of the employed methods or techniques were reported to be effective in order to reach the aim. However, there has been no research reported in the literature in which gifted students were the subjects participating in the Philosophy for Children program with the aim of enhancing their CT or English-speaking skills in the Turkish context.

Thanks to the present study, it is expected that the handled findings might be enlightening for the education of gifted students in Türkiye. Furthermore, this study has been considered significant as it aims to provide contribution to the development of 21st century skills of gifted

students by making them use their higher-level thinking skills. It is also assumed that P4C-enhanced speaking practices also can create a positive impact on English speaking skills of the gifted students with the help of an interesting and challenging discussion environment.

2. METHOD

2.1. Research Design

This study is a quasi-experimental study with pre-test and post-test administration and involves the participation of experimental and control groups. Convenience sampling method was adopted in choosing the participants of the study. One of the groups was the researcher's group within the regular program in SAC and it was assigned as the experimental group. The researcher did not have another 7th grade group at the time of the study. As a result, the researcher created an elective English-speaking class and the students who wanted to take part in this class formed the control group.

Since critical thinking, one of the main focuses of the current study, has been considered as complex and multifaceted to be measured correctly, many psychologists and educators have centered upon the difficulties in understanding or effectively assessing CT (Arter & Salmon, 1987; Chamberlain, 1993). To be able to reach more valid and reliable findings in measuring CT, collecting both quantitative and qualitative data to provide a greater depth of understanding and to increase the "strength and rigor" of an investigation (Patton, 1990, p. 60) was preferred by the researcher. Considering the emphasis on the importance of employing multi-methods design in data collection process of the research; in this study, quantitative data were collected through critical thinking and English-speaking tests and qualitative data of the study were gathered through student-reflective journals and responses of the participants to an evaluation form which has four questions based on the main focus of the study.

The sample of the present study comprised 23 seventh grade gifted individuals who were accepted to a Science and Art Center in Denizli, Türkiye. Science and Art Centers (SACs) are the main institutions for gifted individuals as after the school institutions in Türkiye that create a response to the needs and expectations of exceptional children from 2nd, 3rd or 4th grades till the end of high school. SACs aim to make gifted students become aware of their talents and discover their potential, foster their skills, and assist them for their future progress. As well as the other courses, the students have two English classes within their weekly schedule and can also prefer to join elective foreign language classes. In SACs, there is no established curriculum but a program that suggests some themes and objectives. Teachers have the freedom of designing and conducting their teaching practices considering the needs of their students and making efforts to improve the students' skills, project management process, and also intellectual development. It is clear that teachers aim to foster the 21st skills of the students such as creativeness, questioning, evaluating objectively, and also CT.

The center where this study was implemented was located in the center of the city and had 645 students at the time of data collection. Some students who lived in the urban areas and identified as gifted came to the center generally at the weekend, because they had classes in their schools on weekdays, and it could not be possible for them to catch the classes due to transportation problems.

The age range of the students in the study was between 12 and 13, and they were studying at different public and private schools in the province of Denizli. All the students spoke Turkish as their mother tongue, and they learned English as a foreign language both in their schools and in the SAC. The students were accepted to the SAC within the General Talent area, and they were at the *recognizing individual abilities* (RIA-2) stage during the study. The students chose English as a main field that they would be studying in SAC till the end of high school. Information regarding the gender of the participants is presented in Table 1.

Table 1. *Gender distribution of the participants.*

Gender	Group	Group		
	Experimental Group	Control Group		
Female	7	6	13	
Male	5	5	10	
TOTAL	12	11	23	

Students' English proficiency levels showed differences as they were involved in different programs in their schools. While the students studying at public schools had four English classes per week at the seventh grade, some of the students studying at private schools joined around 10 to 15 English classes. The students attended classes in SAC once or twice a week according to their school's weekly schedule. They had two English classes per week in SAC, however if they demanded, it was possible for them to join elective English classes as well.

The researcher had 12 students in one of the groups within the regular program in SAC. As implementing P4C-enhanced approach requires a certain level of English proficiency level for the participants and the researcher did not have another 7th grade group in that education term, the researcher created an elective course under the name of *English-Speaking Course* in order to carry out the experiment. The researcher announced it to the 7th grade students in the center and 11 students applied to take part in the course. As Cohen et al. (2007) state, "the larger the sample, the better, as this not only gives greater reliability but also enables more sophisticated statistics to be used" (p. 101). However, as the program in the *recognizing individual abilities* (*RIA-2*) stage in SAC does not allow grouping students in high numbers, it was not possible for the researcher to have more students in the groups. In addition, as the participants belonged to a minority group (gifted individuals) in the society, and they were required to have some certain qualities in order to be involved in the study, the representativeness and generalizability of the results might be expected to be much higher. The researcher separated the students into two groups as sessions 16.30 and 18.10, and the students preferred to join one of the classes considering their weekly schedule.

2.2. Quasi-Experimental Procedure

This study employed a pre-test-post-test control and experimental group design. While the P4C-enhanced speaking course participants were assigned as the experimental group, English speaking elective course participants were assigned as the control group. Design of the study can be seen in Table 2.

Table 2. *Quasi-experimental design of the study.*

Group	Pre-test	Treatment	Post-test
Experimental Group (E)	P1. E	+	P2. E
Control Group (C)	P1. C	-	P2. C

In this study, while the experimental group was exposed to P4C-enhanced speaking activities, the control group was involved in speaking classes within the regular program of SAC (See Appendix 1 and Appendix 2, respectively). The duration of the sessions was the same for both groups as 10 weeks, which included two classes of 40 minutes per week. Before starting the implementation, parents of all the participants were requested to sign a parental permission form as the participants were under the age of 18. The participants were also informed about the study in terms of ethical concerns. After the Ethical Committee Report was provided from Pamukkale University and the necessary permission was taken from The Ministry of National Education, Critical Thinking Tests and English-Speaking Tests were administered in both of the groups as pre-test during the first week. Before beginning the sessions, the participants were

provided with information concerning the procedure and also the scope and sub-skills of critical thinking.

The first session was implemented in mother tongue (Turkish) of the participants as the researcher wanted them to gain some knowledge about the treatment. The terms such as "facilitator, participants, community of inquiry" were introduced and the principles of the discussions were identified and written down on a paper with the students and the paper was hung on the board as Wartenberg (2009) suggests. This board was created for the research on the wall of the classroom and included some common phrases and questions that they would be using, and the list of rules that they were supposed to consider during the discussions. The rules that were defined by the experimental group and the facilitator included: We show respect to others' opinions, beliefs and ideas; We learn from each other; We listen to each other actively; We question, explain, and reason; We make an explanation for our opinions/choices; We are not biased; We criticize others in a polite and objective way; We accept others' fair criticisms towards us; We express our opinions freely; We evaluate from various perspectives; and We can construct and conduct and argument.

In order to create a peaceful atmosphere and to establish a rapport between the researcher and the students in the classroom, they were also instructed that there was no authority, everybody was free to express their ideas or opinions in a respectful way, and they were to show respect to different ideas. While giving the instruction during the sessions, the researcher used Turkish in some critical points that would create an effect on comprehension of the participants or lead to misunderstanding. The researcher acted as a facilitator and a moderator during the discussions.

In a P4C session, the facilitators need a stimulus such as a story, a picture, a video, or a poem that has the potential of taking the attention of the participants at the beginning phase. In order to create a deeper understanding of how to apply this approach in classes for educators or teachers, a description of a session implemented by the researcher is provided here (see Appendix 1 for more details). In a P4C implementation constructed on the concept of freedom and social identity, the facilitator starts the session with a short video from Robinson Cruise, who survived in a deserted island after a plane crash. After the students watch the video, they are instructed to suppose that they are lost in an island and stay alone, need to explore the island, and find the ways of surviving on the island. At this point, they are requested to be groups of 3-4 people with a poster, pencils, and crayons and are told that they are going to create their own society by discussing and having common decisions as a group. Then, an instruction paper that involves information about what they should do is handed out. They are supposed to meet on a common point in terms of the name, population, currency, income sources, governmental issues, freedom limits, and rules of the society and reflect them on the posters. While the group members discuss and study on their posters, the facilitator observes the groups without any inducement. After they complete their posters, they are requested to choose a leader who is going to introduce their work. During the presentations, the facilitator addresses philosophical questions to the group members such as: "How did you share decision-making?, How did you reach a consensus?, Is it possible for a society to be completely free?, and Would you like to live and govern in the society you create?". In this way, a big group discussion is carried out by making them to think deeper on the process and on the concepts. The students are required to provide a reason or explanation for their choices. The facilitator does not interrupt with their answers or express his/her opinion on the issue. S/he summarizes the participants' expressions when needed and takes the attention to the matters that the participants cannot agree on and cannot reach a common point. If the group members do not participate in the discussions actively, the facilitator creates dilemmas and addresses controversial questions to make them

express their opinions. At the end of the session, the participants are requested to construct a meaning of freedom on their own.

As it can be seen from the session described, the facilitator is prepared in terms of addressing the effective philosophical questions at the right time. And also, the facilitator is aware of the potential responses of the participants before the session which enables her to address new provoking questions during the flow of the discussion. As the participants are supposed to explain their choice or disagreement, they handle the opportunity of fostering their reasoning skills as well. In this session, the objective of the session is not only to make the participants to collaborate with a group-work, a big discussion is also carried out after the presentations through which deep thinking and meaning construction of the concept can be realized. As a conclusion, it can be stated that this P4C implementation creates a contribution to the development of discussion, collaboration, leadership, creativity, reasoning, and social skills of the participants as well as using the target language for communicative purposes.

2.3. Data Collection Instruments

In this study two instruments were used to collect quantitative data on the effect of P4C instruction; namely, Cambridge A2 Speaking Test for Schools to measure English speaking skills of the participants and Cornell Critical Thinking Test Level X to measure critical thinking skills of the participants. Cambridge speaking test was preferred in the study as it is a widely used test around the world. It also includes the rubric which is scored over five points for each criterion. The rubric involves grammar and vocabulary, pronunciation, interactive communication, and global achievement criteria. The speaking tests were recorded in video format as the researchers wanted to watch each one several times to increase the objectivity and reliability in scoring. Moreover, the researchers administered the tests with another teacher as an assessor to increase interrater reliability and compared the results.

Cornell Critical Thinking Test (CCTT) X level was used to measure critical thinking skills of the participants in pre-test and post-test. CCTT, one of the most widely used CT tests all over the world, was developed by Ennis and Millman (1985) in multiple choice format (three choices) and involved 75 questions in total. Five of the questions were already answered as examples; as a result, test-takers were required to answer 71 questions. X level was suitable for individuals graded between four and 14. Maximum time for the administration of the test was 80 minutes based on the grade of the test-takers. Reliability values of the test range between 0.67 and 0.90 according to the international studies (Ennis, Millman & Thomko, 2005). In the Turkish context, Akar (2007) translated CCTT into Turkish in his doctoral dissertation, and the Cronbach Alpha reliability value of the test was found to be 0.71 in the pilot administration. Sub-skills that were measured in the test included: *Deduction through inductive reasoning (23 items)*; *Deduction through deductive reasoning (14 items)*; *Questioning credibility and reliability of the sources (24 items)*; and *Identification of assumptions (10 items)*.

In order to eliminate the risk of misunderstanding resulting from language for the test-takers, CCTT was administered in the Turkish format. The Company Palindrom is the legal representative of the CCTT in Türkiye, and the tests were purchased from the company. The company sent the printed tests to the researchers, and after the administration, these tests were sent back to the company. Scoring of the CCTT was made by the Palindrom, and the statistical analysis of the tests was carried out by the researchers.

In this study, two different instruments were used to gather qualitative data. One of the instruments was the student-reflective journals. The participants were instructed to write in their journals in the last five or 10 minutes of the sessions, which enabled the participants to write as a way of reflection on the discussions, materials, or stimulus presented at the beginning of the practices. The participants were instructed to write freely, and in this way, they gained an

opportunity of sharing their feelings, ideas or thoughts about the implementation, especially for the ones who did not prefer expressing themselves orally during the discussions. They could also write about some private issues that they were hesitant to discuss with their classmates. While they were told that they would feel free to write anything they wanted, they were also instructed for the issues they needed to take into account in reflection on the sessions with an aim to determine a framework for their writing so as to carry out the content analysis in a more accurate way. Another contribution of journal writing for the participants was also providing the chance of summarizing the discussions and thinking over the talk during the sessions. As a result, the researcher was able to explore the themes and emerging issues and get an insight concerning the effects of the implementation on the participants.

The other instrument employed to collect qualitative data was a written evaluation form including four questions that were designed by the researcher to enable the participants to reflect on the effects of the treatment overall at the end of the process. 12 participants in the experimental group were requested to explain their answers in order to provide in-depth data and give them the chance of reflecting on their experience in their own words. Written forms were preferred instead of an interview with an aim for the participants to eliminate the risk of not sharing what they were thinking exactly with the teacher. It would also be probable that they would not make up their minds and organize their ideas within the flow of communication and in a definite amount of time if they were interviewed. The participants were also informed that they were not supposed to write their names on the forms to make them feel more secure and free to share their opinions. The questions of the form were constructed on the variables of the research and are as follows: 1. Which of your skills do you think P4C practices fostered? (Critical thinking, questioning, analyzing, evaluation, showing respect to different opinions, etc.) Please explain; 2. Do you think that P4C practices which were implemented in English created a positive or negative impact on your English-speaking skill? Please explain; 3. Do you think that P4C practices have some drawbacks for you? Please explain; and 4. Do you think that you could look from different perspectives and think differently from the other people in your daily life after joining P4C sessions? Please explain.

2.4. Data Analysis

As the copyright owner of the CCTT, scoring of the tests was done by the Company Palindrom in Türkiye, and the results were sent back to the researcher. Each multiple-choice item of the test has one correct answer; however, one item in the test can measure more than one CT subskill. For this reason, as it can be seen in the tables of the results section, total score of the test is higher than the sum of all CT sub-skill scores. The company stated that they had a special algorithm for calculating the test which was not publicly available. The company had the answer key for the test and checked the answer sheets of the participants. Before deciding which test to run in the data analysis of the CCTT, normality of the data was checked. The results of the normality test can be seen in Table 3. As the next step, results of the CCTT were analyzed by employing independent sample *t*-test via the Statistical Package for Social Science (SPSS) program.

Table 3. Normality test results of the CCTT pre-test and post-test scores of the groups.

	Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Pre-test	Control-group	.217	11	.155	.922	11	.339
Pre-test	Experimental group	.134	12	$.200^{*}$.978	12	.972
Post-test	Control group	.215	11	.167	.925	11	.364
	Experimental group	.180	12	$.200^{*}$.962	12	.806

^{*} *p* < .005

While determining normality of the data, as Büyüköztürk et al. (2014) and Demir et al (2016) state, the number of the sample should be taken into consideration. If the sample size is big, the Kolmogorov-Smirnov test is recommended, however if the sample size is small, the Shapiro-Wilk test is recommended. Since the number of participants in this study was below 30, Shapiro-Wilk value was taken into consideration in evaluating normality of the data. As it can be seen from Table 4, the pre-test of both the groups can be considered as normally distributed (p > 0.05). After examining histograms and QQ plots for both of the groups as well, it became possible to assume normality and decide to use a parametric test.

Table 4. *Normality test results of the pre-test and post-test scores of the groups.*

	Group	Kolmogorov-Smirnov ^a		Smirnov ^a	Shapiro-Wilk		ζ.
		Statistic	Df	Sig.	Statistic	Df	Sig.
D 4 4 C	Control Group	.189	11	.200*	.898	11	.172
Pre-test Scores	Experimental Group	.193	12	.200*	.918	12	.271
Doct test Coopes	Control Group	.125	11	.200*	.966	11	.847
Post-test Scores	Experimental Group	.170	12	.200*	.929	12	.372

^{*} *p* < .005

In the analysis of the quantitative data collected through Cambridge Speaking Test, speaking test performances of the participants were assessed by the interlocutor (researcher) and the assessor (participating teacher), who took part in the test implementations. In order to determine interrater reliability of scoring the instrument, performances of the participants were recorded in video format and watched several times after the implementation. The results obtained by the two scorers were compared, and it was seen that there was a high consistency between the scores. In the last step, arithmetic means of the points were calculated and the final scores of the participants were identified. At the first step of the data analysis, normality tests were run via SPSS software program to check whether the data were distributed normally or not. After it was seen that the data were distributed normally, independent sample *t*-test was used to find out whether there was a significant difference between post-test scores of the control and experimental groups or not.

Since the number of participants was limited in this study, Shapiro-Wilk value was taken into consideration in evaluating normality of the data. As it can be seen from Table 6, both of the groups' pre-test can be considered as normally distributed (p > 0.05). After examining histograms and QQ plots for both of the groups as well, it became possible to assume normality and decide to use a parametric test.

In this study, to analyze the qualitative data gathered through student-reflective journals and evaluation forms filled by the experimental group students, content analysis was carried out. Content analysis is defined as "any technique for making inferences by systematically and objectively identifying special characteristics of messages" (Holsti, 1968, p. 604). The aim was to find out common thematic elements throughout the research, so, as the first step, the reflection written on the student journals and the responses given in the evaluation forms were initially examined several times and then similar statements were coded and categorized. In the coding step, the common and emerging answers based on the themes were found out. In order to identify the data, the most common responses were categorized basically as concepts, key themes were found, and the frequencies of the concepts were analyzed. The most common responses were illustrated by tables for the evaluation forms.

To strengthen the reliability of the content analysis, stability, reproducibility, and accuracy factors were also taken into consideration (Palmquist, 2012). In terms of reproducibility and accuracy factor, the data were examined at different times by the researchers. Furthermore, while presenting the findings in the results section, direct quotations that belong to the

participants were shared to illustrate the emerging themes and establish the credibility of qualitative data.

3. RESULTS

3.1. P4C-enhanced English Speaking Practices in Fostering Critical Thinking Skills of Gifted Students

In order to find an answer to the first research question of the study, CCTT was administered as pre-test and post-test. The test scores were calculated by the Company Palindrom and the researcher carried out the data analysis by using SPSS software program. Before deciding which analysis test to run, normality of the pre-test and post-test scores of the groups was checked. After it was found out that the data were distributed normally, an independent sample *t*-test as a parametric test was employed to test whether there was a significant difference between pre-test and post-test scores of the groups or not. The results of the test can be seen in Table 5 and Table 6.

Table 5. *CCTT Results of the independent sample t-test.*

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	Control-group	11	39.3636	5.31550	1.60268
	Experimental group	12	41.4167	5.05350	1.45882
Post-test	Control-group	11	38.6364	6.56160	1.97840
	Experimental group	12	43.8333	5.07818	1.46594

Table 6. *CCTT Results of the independent sample t-test.*

Variable	Group	N	M	SD	t	p
Critical	Experimental Group	12	43.8333	5.07818	-2.111	.048
thinking	Control Group	12	38.6364	6.56160		

^{*} *p* < .005

When the results of the independent sample t-test are considered, it can be seen that mean values of the pre-test scores of the control group and experimental group were similar (Experimental group = 41.41, Control group = 39.36). Even if there was a difference, it was not found statistically significant (p > 0.05). This result shows that both of the groups had similar critical thinking skills test scores at the beginning of the study.

On the other hand, mean values of the post-test scores of the groups show difference, namely the control group= 38.63 and the experimental group= 43.83. While the experimental group showed progress in post-test results, the control group's post-test scores were found to be lower than their pre-test scores. As the last step of the analysis, the difference between post-test scores of the groups was checked and found to be statistically significant with the p value .048 (p > 0.05). These results suggest that the experimental group which received treatment showed a higher performance in critical thinking skills test when compared to the control group which followed the routine speaking course and did not receive the treatment. In the light of the findings, it can be concluded that P4C-enhanced speaking practices created a positive impact on CT skills of the gifted students.

3.2. P4C-enhanced English-Speaking Practices in Fostering English Speaking Skills of Gifted Students

In order to investigate the answer for the second research question of the study, several steps were to be followed to identify whether P4C-enhanced speaking practices crated a positive impact on English speaking skills of the experimental group or not. For this aim, first of all, normality of pre-test and post-test scores of the groups was tested via the SPSS software

program. After it was determined that the data of the English-speaking tests were distributed normally, independent sample *t*-test was run to examine the difference between pre-test and post-test scores of the participants. The results can be seen in Table 7 and Table 8.

Table 7. *Independent sample t-test results of the Cambridge Speaking Test.*

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	Control Group	11	16.2727	1.23215	.37151
Scores	Experimental Group	12	16.5833	1.24011	.35799
Post-test	Control Group	11	16.9545	1.57249	.47412
Scores	Experimental Group	12	17.6667	1.51257	.43664

Table 8. Independent sample t-test results of the Cambridge Speaking Test.

Variable	Group	N	Mean	SD	t	p
English	Experimental Group	12	17.6667	1.51257	1.105	.282
speaking skill	Control Group	12	16.9545	1.57249		

^{*} *p* < .005

According to the independent *t*-test results, it can be seen that mean values of the pre-test scores of the groups show quite similarity (Control group = 16.27; Experimental group = 16.58). No significant difference was found between pre-test scores of the control and experimental groups (p > 0.05). As a result, both of the groups had similar English-speaking proficiency at the beginning of the study. When the difference between post-test scores of the groups is compared, it can be reported that experimental group (M = 1.08 / difference) outperformed the control group (M = 0.68 / difference) in the English speaking test; however, the difference between post-test and pre-test results of the experimental and control groups was not found statistically significant considering the p value .282 (p > 0.05). These results indicate that, P4C-enhanced speaking practices fostered English speaking skills of the experimental group when compared to those of the control group which did not receive the treatment.

3.3. Participating Gifted Students' Opinions about P4C-enhanced English-Speaking Practices

In this study, student-reflective dairies were used to collect qualitative data as a way of revealing opinions of the experimental group participants about the treatment they received for ten weeks within this study, which aimed to support the quantitative data to increase the possibility of obtaining more reliable results. At the end of the each P4C session, for 5 or 10 minutes, experimental group students (N=12) wrote about their opinions, feelings or ideas considering the session they experienced in their journals in English. They got the opportunity to reflect on the sessions by writing freely and expressing their opinions. In some sessions, they mentioned the challenges or difficulties they encountered during the discussions. As the teacher did not interrupt with students' speech or force them to speak, some students could explain their choices, opinions or preferences concerning the studied theme or dilemma by writing in their journals. However, some students were not so eager to give detailed information and they preferred to write shortly. Journal writings were analyzed with content analysis to find out the main categories with emerging points, patterns, and tendencies of the participants.

Considering students' pieces of writing in their journals, it was seen that they occasionally used journal writing as a way of making a summary and concluding their opinions after the sessions. From a general perspective, they generally wrote about the new English words they learned, the points that were confusing and challenging for them, the skills that they could foster during the discussions, whether they shared the same opinion with their group members or not and the new perspectives they could realize. After the analysis, two main categories were identified

based on the student-reflective journals: Positive experiences and advantages of P4C practices and negative experiences and disadvantages of P4C practices. Statements of the participants concerning the main categories that reflect their opinions are shared in the next part.

3.3.1. First Category: Positive Experiences of the Participants / Advantages of P4C Practices

Based on the analysis results of the student-reflective journal writings, it can be concluded that most of the participants reported positive comments regarding different dimensions of the P4C sessions. Six themes were identified under the first category in the data analysis process. These themes were based on the outcomes of the P4C practices which were: Fostering collaboration skills, contributing to gaining new perspectives, enhancing discussion skills, making people think deeply and question the truth, teaching new English words, and providing a different experience from the participating students' regular school environment.

By addressing the first theme of the first category, *fostering collaboration skills*, five of the participants stated that P4C discussions contributed to their collaboration skills through groupwork and group-discussions. Following quotations of the participants can be given as examples to illustrate:

- (1) I learned how to live in a community and designed a new island thanks to the collaboration with my group friends. $(P1/2^{nd} session)^{\dagger}$
- (2) ... we tried to make a common decision with our group friends, collaboration was useful. $(P2/2^{nd} session)$

For the second theme, *contributing to gaining new perspectives*, which emerged from the first main category, six of the participants expressed their opinions about the new perspectives they could realize during the P4C practices. They mentioned that they did not look from that perspective earlier or they could realize something new about their point of view during the discussions. The following quotations can be helpful to support this finding:

- (3) I realized that in order to trust someone, I need to know him/her. (P3/6th session)
- (4) I realized that equality and justice are not the same things. $(P2/2^{nd} session)$
- (5) I noticed that some bad things may be good for us or for our environment depending on the situation... $(P10/1^{st} session)$

Third, fourth and the fifth statements support each other in terms of reflecting the participants' satisfaction that they could discover something new about themselves. They came through these results by responding to a questionnaire about 'How emphatic I am' during the P4C session. On the other hand, the fourth quotation indicates that the participants could distinguish between concepts and construct meanings of their own regarding the main themes that focused on the P4C sessions. This finding serves the objectives of the P4C pedagogy which aims to assist the community of inquiry to think deeply and construct new knowledge through questioning and discussing.

Based on the third theme which was *enhancing discussion skills*, as a natural property of the group discussions, eight of the participants expressed opinions that they experienced agreeing or disagreeing with their friends during the discussions. Some of them mentioned that they changed their ideas after listening to their friends and accepted that their friends could be right from that point of view:

- (6) I changed my idea after we discussed with my friends; it was hard to decide... (P7/8th session)
- (7) We had some common ideas with my friends; we shared the same idea today. $(P5/2^{nd} session)$
- (8) ... I agreed with my friends in general. (P12/8th session)

⁻

^{† (}P... is used to show the number of the participant, and the number of the session for which the participants expressed opinion is given between the parentheses).

These remarks suggest that the participants attained the opportunity of expressing agreement or disagreement during the discussions which contributed to the development of their discussing skills. In this way, they could express their opinions freely and learned to defend their ideas in a respectful way.

Based on the fourth theme, *making people to think deeply and question the truth*, which arose from the main categories of the findings, four of the participants reported that P4C practices enabled them to think deeply and question the knowledge they encountered. Following statements might be striking to support this finding:

```
(9) I thought deeply everything in this class... (P5/6<sup>th</sup> session)
(10) ...the story was nice; it consistently directs people to question... (P7/7<sup>th</sup> session)
(11) It was hard for me to decide between valid and sound statements. I was confused when I questioned them ... (P1/4<sup>th</sup> session)
```

These expressions are considered extremely valuable as they indicate that the P4C practices encouraged the participants to question the truth they encounter and think deeply. Even if they mentioned these concerns as hardships or troubles they experienced in the sessions, they are in fact the challenges that the community of inquiry members are supposed to struggle with and lead them to think deeply during the P4C inquires. These findings suggest that P4C practices provided contributions to the development of higher-level thinking skills on the part of the participants.

Nine of the participants also stated that they learned new words during the sessions about various subjects that they did not learn in regular classrooms as a supporting data for the fifth theme which was *teaching new English words*. Some of the participants also mentioned that they were motivated to speak English as the issues focused on during the debates were challenging and interesting for them even if they did not consider themselves proficient in speaking English. The following examples can show their opinions:

```
(12) I learned what equality and justice are... (P6/2<sup>nd</sup> session)
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- (13) I learned new words such as prejudice and disabled in this session. ($P3/3^{rd}$ session)
- (14) Today we learned new words about epistemology... (P1/4th session)
- (15) I don't speak English well, but I tried to speak because the topic was interesting ... (P7/2nd session)

The sixth theme based on the positive experiences of the participants / advantages of P4C practices category reflected favoring opinions of the participants about the treatment. Six of the participants reported positive remarks about the practices. The following quotations show their satisfaction as they enjoyed the practices in general being involved in a different learning environment through which they could get the chance of expressing their opinions:

```
(16) I had fun in this class, it was useful, we had a good practice... (P5/6<sup>th</sup> session)
(17) I realized that I am an emphatic person in fact, I liked it. Thanks teacher! (P5/3rd session)
(18) ... it was a good and beneficial lesson. (P7/6<sup>th</sup> lesson)
(19) ... we discussed on a very important subject (empathy), it was fun. (P11/3<sup>rd</sup> session)
```

3.3.2. Second Category: Negative Experiences of the Participants / Disadvantages of P4C Practices

According to the findings obtained through the student-reflective journals, a low number of participants reported negative experiences or disadvantages of P4C. Only four themes could be identified within this category which were: Feeling confused while making a decision; having difficulty in finding reasons for their choices and provide an explanation for their preferences; getting bored when they were addressed various questions and when they disagreed with others; and some of their friends being not respectful enough to listen to them.

Concerning the first theme of the second category, *they felt confused while making a decision;* the participants stated that they struggled with making up their minds and coming through a decision during the inquiries. The following quotations may be helpful to show this finding:

- (1) Today, we focused on ethics, it was hard and complicated. (P7)
- (2) When we were asked many questions, I couldn't make up my mind. (P5)
- (3) We studied critical reasoning today and I felt confused. (P3)

For the second theme, they had difficulty in finding reasons for their choices and provide an explanation for their preferences, the participants expressed that:

- (4) I couldn't explain my ideas, it was challenging. (P10)
- (5) Sometimes it was difficult for me to explain my choice, even though I had a preference. (P8) Based on the third theme which was they got bored when they were addressed various questions, the participants reported that they would feel bored as it was challenging for them to respond to many provoking questions during the discussions. One of the participant's quotations can be given as an example for this finding:
 - (6) When we were asked too many questions, I started to feel bored. (P12)

The fourth theme of the second category, which was *some of their friends were not respectful enough to listen to them*, illustrates one of the weaknesses of participants especially at the beginning of the treatment. One of the goals of P4C practices was also strengthening discussion skills of the students such as listening to others actively, expressing agreement or disagreement in a polite way, and showing respect towards strange opinions. This expression of the participant shows her disturbance when the others did not listen to her during the discussion:

- (7) Some friends were disrespectful towards my opinion, but no problem! (P2)
- (8) I hope everybody will learn how to discuss! (P1)

As mentioned before, the participants consider these challenges of the P4C practices as hardships or drawbacks. However, in a community of inquiry, it is something required and favored for the participants to feel confused and indecisive while struggling with dilemmas and conflicting ideas.

3.4. Evaluation Forms

At the end of the implementation process, the participants were instructed about filling out an evaluation form that was designed to elicit their overall opinions about the treatment they received. The form consisted of four open-ended questions to make the participants provide more detailed data. First of all, the participants were requested to respond to the questions in their mother tongue as the main objective was not to assess language proficiency. Moreover, the researcher wanted to enable them to express their opinions freely without dealing with translation from Turkish to English and eliminate the risk of language mistakes that would cause problems in data analysis process while finding out the categories and themes. After they finished filling out the form in Turkish, the participants translated their responses into English with the help of the researcher. In the analysis of the data, the researcher examined both Turkish and English versions of the forms to check accuracy.

The same data analysis process was followed as in the examining of student-reflective journals. The participating researcher took part in the analysis of the evaluation form as another rater as well, and the results were compared before reaching a consensus. As mentioned before, the responses of the participants in the form were not long enough and not so detailed; as a result, and a high consistency was found between the obtained results of the researchers. Only a theme was added to the fourth question and two codes were omitted from the second question after

discussion. Table 9 shows the obtained categories and codes from the evaluation forms based on the four questions of the instrument.

Table 9. *Opinions of the participants towards P4C-enhanced speaking practices.*

Question	Theme	f
1. Which of your skills do you think	Analyzing	5
P4C practices fostered? (Critical	Critical thinking	5
thinking, questioning, analyzing,	Questioning	4
evaluation, showing respect to	Showing respect to different opinions	4
different opinions, etc.) Please	Discussing	4
explain.	Defending opinions in a polite way	3
	Thinking deeply	2 2
	Changing minds	2
	Explaining	2
	Distinguishing between concepts	1
	Comparing and contrasting	1
2. Do you think that P4C practices	Learning new words	7
which were implemented in English	Positive Encouraging to speak English	6
created a positive or negative	Pronunciation	1
impact on your English-speaking		
skill?	Negative No	12
Please explain.		
3. Do you think that P4C practices have	Boring	4
some drawbacks for you? Please	Feeling confused during the discussions	3
explain.	Asking many questions on the same issue	2
	Too much discussion	2
4. Do you think that you could look	No	6
from different perspectives and	Thinking different from others	3
think differently from the other	Showing tolerance to others	3 2
people in your daily life after	Showing respect to others	
joining P4C sessions? Please	Looking from other perspectives	2
explain.	Breaking the prejudices	2
	Questioning more than the others	2
	Using empathy more often	2

In the light of the findings demonstrated in Table 9, it can be stated that the participants generally mentioned positive outcomes or experiences concerning P4C-enhanced speaking practices. For the first question, they reported various skills that were fostered through P4C sessions. The highest percentage belongs to critical thinking and analyzing skills, which has vital importance for the participants to realize the effects of the treatment on their thinking and discussing skills. They also think that P4C practices created a positive impact on their questioning and discussion skills. The following quotations can be given as examples reflecting their opinions:

- (1) In my opinion; P4C improved my critical thinking and questioning skills. (P4)
- (2) I learned to think in detail and how to discuss properly. I showed respect to others' opinions... (P2)
- (3) I learned to be more polite during the discussions... (P10)
- (4) I feel like P4C developed my questioning skill most. At the beginning of the sessions, I had an idea, but sometimes I changed my ideas as the story progressed and my friends expressed their opinions. (P1)

Responses that were given for the second question were generally positive in terms of the effects of P4C practices on English speaking skills of the participants. While all of the participants stated that there was no negative effect of P4C on their English-speaking skills,

most of them reported learning new English words as a positive outcome of the treatment. In addition, half of the participants believed that implementing P4C sessions in English and challenging discussion issues were encouraging for them to express themselves orally and were useful to enhance their English-speaking skills. To illustrate these opinions, the following responses can be considered:

- (5) I think, it affects English speaking skill positively, because we had to speak English during the sessions. (P8)
- (6) Yes, I think it improved my English. I learned new words, tried to speak on interesting topics. (P11)
- (7) Too positive, it motivated me, it was nice. Moreover, it was better for us to practice in English during the discussions. (P2)

When the responses for the third question which addressed the drawbacks of the P4C implementations (if any) for the participants are considered, it can be seen that four of the participants found P4C practices boring for some cases and two of the participants felt confused during the discussions. As the P4C pedagogy was mainly implemented through addressing philosophical questions, it was accepted normal that the participants felt bored and confused to give a response to the questions or provide an explanation for their choices. Unfortunately, teenagers in our age mostly do not want to think over some issues deeply and prefer giving up finding reasons for their ideas after a short time. It was observed by the observer especially at the first sessions until the participants were accustomed to the implementations. The following responses of the participants can be given as examples:

- (8) When I couldn't find an idea or decide, sometimes I lost my motivation... (P3)
- (9) When you discuss a lot, it becomes tiring... (P4)
- (10) When we were asked too many questions, I started to feel bored. (P12)

When it comes to the last question of the evaluation form which addressed whether the participants could observe positive changes in their thinking skills in their lives after P4C practices or not, half of them provided negative responses. While three of the participants stated that they probably thought differently from others, three of them mentioned that they could show more tolerance to others in their daily lives. It should be considered significant that they were aware of the improvements in their thinking and daily life skills. Quotations that support this finding are as follows:

- (11) Yes, I think my opinion and point of view towards others has changed positively; I can break my prejudices and I can think from different perspectives. (P5)
- (12) I started to question the reasons for some events more often. (P1)
- (13) In my opinion, the implementation did not affect me in my daily life. (P4)
- (14) I can establish empathy more often; I try to use these skills in my daily life. (P8)

4. DISCUSSION and CONCLUSION

The major purpose of the present study was to investigate the effectiveness of P4C-enhanced speaking practices on English speaking and CT skills of gifted students. Moreover, another objective of the study was to shed light upon the experimental group students' opinions about the P4C treatment they received within the study. In the light of the related literature, it was revealed that there had been no study which focused on examining whether P4C approach can be effective in EFL classes for gifted students or not in the Turkish context. In this sense, implementing a method that had not been employed in this specific field before was considered to yield enlightening implications for the related literature.

4.1. P4C-enhanced English-Speaking Practices in Fostering Critical Thinking Skills of Gifted Students

Before comparing CTTT scores of the groups, the levels of the groups for CT skills are considered necessary to be examined and discussed. While the control group had a 39.36 mean

value according to the pre-test scores of the CCTT, the mean value of the experimental group was 41.41. These results show that gifted students involved in the present study had an acceptable level of CT skills when the findings of the study carried out by Ennis et al. (2005) are taken into consideration. In the study of Ennis, the mean value of the 7th, 8th and 9th grade samples' CCTT scores was found to be 38. As CCTT was developed by Ennis and Millman (1985), findings of their study can be accepted as a criterion to make comparison for the present study. Furthermore, in his doctoral study, Akar (2007) found out that mean value of the CCTT scores of the 6th grade samples was 29. Although the samples' grade was not the same with the samples of the present study, it can be suggested that 6th grade regular classroom students had a low level of CT skills and gifted students who participated in this study had a higher level of CT skills. As a consequence, it can be indicated that gifted students had the potential of using their CT skills to some extent before implementing the treatment in the present study.

The results of the experimental procedure in which CCTT was used to test CT skills of the students showed that there was a significant difference between the groups in favor of the experimental group students. As an interpretation of this finding, it is known that fostering CT skills requires a long period of time for individuals and has been considered to be difficult to measure. Departing from this assumption, the treatment was implemented for 10 weeks in total. Furthermore, different P4C sessions which were designed with the aim of fostering different sub-skills of CT on different philosophical concepts can be another factor that affected obtaining positive outcomes in the study. In this way, it is believed that the participants could handle the opportunity of being engaged in various P4C sessions through which they could question the truths they were presented, think deeply, and experience discussion and reasoning. The participants were also observed to improve their discussion skills in time; there was a considerable positive change in their habits of active listening, manner of agreeing or disagreeing, and producing sensible reasons. They were fairly better at discovering relationships, exploring alternatives, interacting with group members and responding to 'Why do you think so/can you explain' questions, and they generally provided their answers without waiting for those questions towards the end of the treatment. Consequently, the treatment was supposed to be effective to create a positive impact on CT skills of the participants. This finding is in line with the results of the research of Lam (2013) who examined the effectiveness of Lipman's P4C Approach in enhancing CT skills of the 28 Chinese Secondary 1 students in Hon-Kong. In this study, it was found that the experimental group participants who received philosophy-based instruction were found to have the capability of conducting debates, good thinking, reasoning, and reflective thinking abilities through the implementation of P4C approach and outperformed the control group in CT and reasoning skills.

Another possible key factor that was supposed play a role on this result of the study was the fact that this study was carried out with the participation of 7th grade gifted students who had a certain level of English proficiency and a potential of using higher-level thinking skills. Since they had been identified as highly talented individuals, from a general perspective, they were expected to have the potential of using CT and English language skills compared to their peers. The participants of the present study displayed a pleasing performance in English during the P4C sessions after they gained enough experience on the method; they thought deeply on philosophical concepts, carried out discussions by providing reasons or explanations for their choices or preferences, and constructed meanings on the focused concepts. If this study was conducted with the participation of younger students from regular classrooms who had not been identified as gifted and who did not have a certain level of English proficiency, it would not be possible to carry out P4C discussions in English language effectively and reach meaningful results. According to the results of a related study carried out by Chamberlain (1993) who aimed to evaluate the effect of Lipman's story –Harry Stottlemeier's Discovery- on the critical thinking skills of 80 fourth and fifth grade gifted students over 12 weeks, it was found that experimental

group's scores were significantly higher than the control group's scores on the New Jersey Test. It was reported that interaction among students in the philosophy group increased more than that among the literature group and the students could focus on logic, metacognition, and thinking deeply.

Another study that reached similar results with the present research was carried out by Zulkifli and Hashim (2020) who investigated the effectiveness of P4C approach on enhancing CT skills of 61 secondary grade students in moral education classes in Malaysia. The results of their study indicated that experimental group which received P4C treatment displayed a higher performance than the control group did. As a result, it was reported that P4C implementations contributed to the development of CT skills of the participants which supported the results of the present study. The results of the present study also show parallelism with Türksoy's (2020) study in which positive outcomes of P4C approach were obtained in terms of CT skills of secondary school students in his master thesis. The participants reported positive attitudes towards CT skills after they received P4C treatment which lasted for eight weeks. Even if Türksoy's study was carried out within science lessons, the tested variable, the participants, and the treatment were similar with the present study. Even if the participants were not gifted students, in a similar study, Pala (2022) also reached supporting findings in line with the present study in terms of the positive effects of P4C instruction on CT skills of 5th grade secondary school students in Türkiye. According to the findings of the study, the experimental group displayed a higher performance in Critical Thinking Skills Scale than the control group and the experimental group participants reported positive outcomes of P4C practices.

4.2. P4C-enhanced English-Speaking Practices in Fostering English Speaking Skills of Gifted Students

The other dependent variable of the presents study was English speaking skills of the participants. Results of the Cambridge Speaking Test for Schools A2 revealed no significant differences between the groups in terms of English-speaking skills of the participants. A possible reason for this finding might be attributed to the fact that experimental group joined P4C sessions regularly every week, and they knew what they were supposed to do during the discussions even though the activities and the discussion topics were not the same with the previous weeks. As the qualitative findings of the study demonstrate, the participants would feel bored and confused when they were addressed philosophical questions in every session. In some cases, they did not want to speak, but they were not forced to express their ideas by the facilitator. As the discussion topics and created dilemmas were challenging and interesting for them, they were encouraged to speak and discuss with their group friends. However, the genre and terminology that they used during the sessions were generally limited to the vocabulary related to discussion, explaining, reasoning or questioning expressions.

Considering the qualitative findings, the participants reported that they did not find the sessions enjoyable or fun to feel eager to speak English during the activities. Most of the teenagers of our age are observed to have changing characteristics such as being impatient, ambitious to reach their aims in a short time without enough effort or having the desire to be in the forefront among people. In this sense, since they were not accustomed to this type of discussion experiences in their classroom environments, having the gifted students be engaged in the P4C practices actively was a challenging task for the researcher as well. On the other hand, the control group joined different activities every week such as playing games, making presentations, writing and acting dialogues, and studying Phonetics. They carried out debates in some classes as well in order to make them experience the discussion process like the experimental group. As is known, teenagers are keen on joining enjoyable activities and more motivated to show participation in these learning environments. In this way, they handled the opportunity of using English in different contexts in different settings which was supposed to

contribute to their English-speaking skills. As a result, both of the groups showed a higher performance in post-test scores compared to their pre-test scores, but the difference was not statistically significant, which shows inconsistency with the findings obtained by Rustam et al. (2018) who examined the effectiveness of philosophy-based language teaching approach (PBLT) in fostering English oral fluency of undergraduate students. The findings of their study demonstrated that PBLT approach might provide contributions for the development of English-speaking skills of the students.

On the other hand, contrary to the findings of the present study, Shahini and Riazi (2011) provided evidence on positive outcomes of P4C in terms of English-speaking skill. They aimed to investigate the effect of PBLT techniques on students' speaking, writing, and thinking skills in EFL classrooms in Iran. A significant difference was found between the experimental and control groups' performance in English speaking and writing skills. Their study indicated that PBLT may be an effective tool to enhance students' speaking skills in an ELT context. When compared with these studies, it can be interpreted that the participants, their ages, settings, materials or the duration of the studies may play a role in obtaining different results from the present study.

4.3. Participating Gifted Students' Opinions about P4C-Enhanced English Language Speaking Practices

Qualitative findings of the present study which were gathered through student-reflective journals and evaluation forms filled by the experimental group students demonstrated that the participants mostly reported positive comments on P4C discussions and underlined the contribution of P4C practices to their CT and English-speaking skills. This finding supports the fact that gifted students are considered to be willing and motivated to carry out challenging tasks and activities. In the light of the qualitative findings, it can be suggested that even though the participants did not consider themselves as proficient in speaking English, they tried to speak English during the sessions since the presented stimulus was interesting and the discussion topics were absorbing which encouraged them to share their opinions. The participants also expressed that P4C practices helped them to enhance their CT and higher-level thinking skills such as reasoning, explaining, questioning the credibility of the information, analyzing, or evaluating. It was satisfying that the participants realized the positive effects of P4C on their skills. By conforming the previous findings proposed by Lim (2006) who reported positive attitudes and opinions of gifted 7th grade students towards P4C lessons in Singapore by examining P4C lesson transcriptions, participating students' journal entries, survey responses and interviews; the evidence found in the present research points to the potential of P4C approach in enabling the gifted students to learn thinking critically, reflecting on philosophical issues, and collaborating and constructing meaning.

A low percentage of the participants reported negative comments on P4C practices that they felt bored and confused when they were addressed many compelling and open-ended philosophical questions. As they were not familiar with thinking deeply on philosophical concepts and challenging tasks that enabled them to use their CT skills in their regular classrooms at schools, it was not something surprising for the researcher. This situation can result from the fact that Turkish education system does not embrace implementation of CT skills in the education programs effectively. Even though the Turkish curriculum witnessed a reform from Behaviorist Approach to Constructivist Approach starting in 2004, implementation of CT in the education program has not seemed promising. There may be several reasons for this situation; one of them is that there has been no detailed information for teachers about how to implement CT in different disciplines and the teachers lack practical information to be able to use CT-enhancing classroom activities. The teachers might gain the necessary skills to be critical thinkers through qualified training programs designed by the Turkish MoNE. In

addition, the course books have not been designed as a way of enabling the students to use their CT skills. A report by the Education Reform Initiative also suggests that the reform can be considered effective on theoretical basis; however, it has not been designed by taking the specific needs and characteristics of Turkish teachers and students into account (Gürkaynak et al., 2004).

Another factor that can play a role in students' lack of motivation to think deeply and respond to provoking philosophical questions and use their CT skills is teachers' capabilities in adopting CT-enhancing classroom activities. Studies conducted in the Turkish context have focused on to what extent pre-service teachers can use CT skills (Akar, 2007; Gülveren, 2007; Kökdemir, 2003; Kürüm, 2002), and have shown that CT skills of the pre-service teachers were not at a sufficient level. When the teachers do not have an adequate level of CT skills, it cannot be expected that they aim at fostering CT skills of their students and design their teaching procedure in accordance with this aim. In conclusion, the participants of the present study were not accustomed to CT instruction from their regular classrooms and found it difficult to respond to challenging philosophical questions during the treatment.

4.4. Conclusions

The overall goal of the present study was to explore whether P4C approach can be an effective tool in enhancing English speaking and CT skills of gifted students. Findings obtained indicate that P4C has the potential of stimulating gifted students to think deeply on some important issues and concepts and use their higher-level thinking skills when compared to the traditional methods.

In our globalized world, if educators, teachers, or families expect the students and teenagers to learn how to think, listen to the other people actively and respectfully, realize alternative options in their lives, seek reasons and solutions for the problems they face, show respect to different or interesting views, develop arguments and explore underlying concepts, and eventually become critical thinkers, fundamental changes and revisions have to be made in education programs as well. P4C might create a response to the needs and interests of students by allowing them to ask the questions they develop, satisfying their curiosity in exploring the nature of the world, and providing a room for them to develop meaning.

In order to implement this approach in our classrooms in an effective way, teachers need to get training on how to ask philosophical questions, creating dilemmas, choosing appropriate stimulus, and preparing P4C lessons consistent with the objectives of the program. Learning to be a facilitator and integrating P4C approach into our disciplines is not a simple task and requires hard work and time. Based on the observations in the light of the findings, the P4C approach has been considered to take the attention of the students to a very different or undetected point even in daily life matters. As people are already accustomed to many preconceptions in their daily lives, they do not even think of the possibility of questioning or inquiring about the truths or information they are presented. In our age, where accessing knowledge has become easy and quick, students mostly accept the truths or information they encounter as true without searching for its credibility and source. In this sense, the P4C approach may be beneficial in making our students gain 21st century skills such as questioning, searching reliability of the information, distinguishing between fact and opinion, and thinking critically.

In the light of the obtained findings of the study and observations and experiences of the researcher, some suggestions can also be proposed. This quasi-experimental study was carried out by the participation of 23 seventh grade gifted students and the treatment lasted for 10 weeks of 2 classes per week. Future studies that will last for longer periods to examine the effects of P4C approach can be carried out. This study involved a control and experimental group to reach

more reliable results; however, the number of the samples was limited within the circumstances of the term in which the study was conducted. A higher number of samples can be involved in future studies. The most challenging aspect of conducting the present study for the researcher was to find a CT test appropriate for the age and level of the participants. In the Turkish context, no appropriate CT test was found for the sample of the present study. Foreign CT tests carry the risk of language comprehension and cultural differences for other nations, thus Turkish researchers or academicians who want to contribute to the literature can develop CT tests suitable for different levels and ages. In this study, the dependent variables were English speaking and CT skills of the gifted students. In further studies, the impact of P4C approach on different variables can be investigated. In addition, this research was conducted with the participation of 7th grade gifted students and the results cannot be generalized to other students; further studies which will involve regular classroom students or different grade gifted students may yield beneficial implications to the literature and make it possible to compare the performance of gifted students and their peers in regular classrooms. In terms of the integration of P4C approach into regular classrooms, P4C can be implemented as a stand-alone activity within the program or can be fully integrated into the curriculum. As an independent course, teachers migh have one-hour practice of P4C weekly to support curriculum-connected enquiry. Even in this way, it would be possible to engage the students with listening actively, thinking philosophically and gaining effective discussion skills. As a second alternative, the curriculum needs to be designed completely as a way to "plan P4C around the conceptual content in schemes of work" (Sapere P4C, 2023, p. 1). It may therefore be possible to create philosophical dialogues with the students in every discipline and in every subject; for instance, in a math class, a teacher might prompt the students to deeper thinking by asking "Was mathematics invented or discovered?"; in a language class, teachers can ask "Could there be a perfect translation?" to make the students look from different perspectives with a high level of mindfulness. As a conclusion, researchers in the field of program development can focus on integrating P4C approach into different disciplines and Turkish education program starting from an early age as well as producing new materials and course books which include openended questions, compelling activities or stories that have philosophically rich content.

4.5. Suggestions for Practitioners

P4C does not mean teaching philosophy; teachers and practitioners from many disciplines can implement it in their own classrooms as a method that encourages the students to question the truth, construct meaning, gain appropriate discussion skills, and become critical thinkers. Teachers and practitioners should also get training in how to be a facilitator; otherwise, they cannot implement P4C approach in an effective and appropriate way. Institutions or universities can organize in-service training for volunteer teachers or educators who want to integrate the P4C approach into their teaching procedures. Especially kindergarten teachers should get training in P4C and be encouraged to employ this approach in their classrooms based on the assumption that philosophizing should start at an early age to become a life-long habit. Furthermore, with a purpose to observe the effects of P4C implementation on cognitive abilities of the students such as higher-level thinking, discussion and CT skills require a long period of time considering the related studies which include a long process of intervention (Colom et al., 2018; Niklasson et al., 1996). When it is practiced on a regular basis, it is highly possible that such a practice will enable the students to perceive long-term significant gains in communication and discussion skills and self-confidence as well.

4.6. Suggestions for Further Study

The treatment of the study lasted 10 weeks within the study; however, more reliable results can be achieved in longer studies since improving higher-level thinking skills and creating a change on CT and English-speaking skills of students require a long period of time to realize.

Additionally, this study was carried out in a specific context as the participants were 7th grade gifted students studying at a SAC and having a certain English proficiency to carry out the philosophical discussions; thus, for future research, studies involving a higher number of students from different grades can be suggested.

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Feride Acar: Methodology, Data Collection, Data Analysis, and Writing the Manuscript. Recep Şahin Arslan: Design, Supervision, and Writing the Manuscript.

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APPENDICES

Appendix 1. Process of implementation with the experimental group.

	v <u>-</u>	
Weeks	Implementation	Lesson Procedure
1st Week	Critical Thinking Test (Pre-test) English Speaking Test (Pre-test) 2 hours (40'+40')	
2 nd Week	Ethics - Identifying the principles for the community of inquiry What makes an action right or wrong? P4C Practice – 2 hours	Stimulus: Heinz's Dilemma (Socratic Story) Group discussion on ethics (in Turkish) Should Heinz steal the medicine for his ill wife? Does stealing the medicine for his ill wife make him an immoral person?
3 rd Week	Freedom / Social Identity How can people become a society? What are the limits of freedom? P4C Practice – 2 hours	Stimulus: Robinson Cruise (A short movie) Constructing a new society on a deserted island What is the name/rules/flag of the new society? How do they meet a common decision? Describing their choices/preferences with reasons
4 th Week	Being aware of empathy, breaking down the prejudices Do you have prejudices? How emphatic are you? P4C Practice – 2 hours	Stimulus: A short movie "The Present" about disabled people Did you think that the boy was a bad character at the beginning of the video? Did you change your mind about the boy after watching the end of the video? Do you think that you have prejudices in your lives? Joining a questionnaire: <i>How empathic are you?</i>
5 th Week	Epistemology / Critical Reasoning How do you know what you know? What counts as a valid reason? P4C Practice – 2 hours	Stimulus: "What's Your Reason" game Writing three reasons for the truth they write Writing three reasons for the falsehood they write Group discussion on whether the reasons are valid or not Attention Test: Do you trust on your senses
6 th Week	Altruism/Environmental Ethics Is it possible to love without any expectations? Does expecting something from somebody mean selfishness? P4C Practice – 2 hours	Stimulus: The story of "The Giving Tree" Discussion on pure love, happiness and environmental ethics When you give something to someone, do you expect something in return? Do you think that there is someone who loves without expecting anything from us?
7 th Week	Ethical Responsibility Am I always responsible for my actions? Can we change our nature? P4C Practice – 2 hours	Stimulus: The story "The Frog and the Scorpion" Discussion on personal and ethical responsibility. If something is in our nature, can we control it?
8 th Week	Morality How do you know what is right and wrong? What would you do if you were invisible? P4C Practice – 2 hours	Stimulus: The story "The Ring of Gyges" Discussion on social morality Would you do good things if there were no authority? Is there a parallelism between what you do and what you expect from others?
9 th Week	Bravery/Cowardice/Fear Should you always do what your community, family or friends ask of you? What is bravery? If you are fearless, are you braver? P4C Practice – 2 hours	Stimulus: The story of "Three Brothers" who join the army Which boy is braver? Can you neglect your duty and still do good?
10 th Week	Justice and Equality	Stimulus: The story of "Winnie the Pooh's Cake"

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	How can we share something? Should we consider justice or equality? P4C Practice – 2 hours	Discussion on how they should share the cake Should they consider equality, justice or needs?
11 th Week	Ethical Responsibility	Stimulus: The story of "New Trainers"
	Should we help or do a favour for everyone, under every circumstance?	Would you give up something important for you to help others?
	P4C Practice – 2 hours	Who is doing wrong in terms of ethical responsibility?
12 th Week	English Speaking Test (Post-test)	English Speaking Test (Post-test)
	Critical Thinking Test (Post-test)	Critical Thinking Test (Post-test)

Appendix 2. Process of implementation with the control group.

Weeks	Implementation	Lesson procedure
1st Week	Critical Thinking Test (Pre-test) English Speaking Test (Pre-test) 2 hours (40'+40')	Critical Thinking Test (Pre-test) English Speaking Test (Pre-test) 2 hours (40'+40')
2 nd Week	Getting to know each other better Regular SAC speaking class program 2 hours	"Find Someone Who" Activity Implementing a questionnaire with the classmates (data collection) Analysing the data Sharing the results with the group by using percentages/rate
3 rd Week	Studying on basic Phonetics Regular SAC speaking class program 2 hours	Focusing on different accents in English Introducing the International Phonetic Alphabet Studying on basic principles in English pronunciation
4 th Week	Name three people / places /things Regular SAC speaking class program 2 hours	A writing and speaking activity Writing three people/places or things on a ready worksheet Sharing the answers
5 th Week	Carrying out a debate Regular SAC speaking class program 2 hours	Debate on "the pros and cons of the technology" Grouping the class into two groups Allowing 20 minutes for preparation Carrying out the debate Peer-assessment
6 th Week	Taboo Game Regular SAC speaking class program 2 hours	Grouping the class into three/four groups Giving ready taboo cards to the speakers Telling the given words without using the forbidden words and making the group friend find the secret word to get points
7 th Week	Making Presentations Regular SAC speaking class program 2 hours	Making presentations about different cultures to the class (4 students who got ready before the class) Question & answer
8 th Week	Making Presentations Regular SAC speaking class program 2 hours	Making presentations about different cultures to the class (4 students who got ready before the class) Question & answer (See overleaf)
9 th Week	Carrying out a debate Regular SAC speaking class program 2 hours	Debate on "Distance or face-to-face education?" Grouping the class into two groups Allowing 20 minutes for preparation Carrying out the debate Peer-assessment
10 th Week	Writing dialogues on a silent movie and acting it out Regular SAC speaking class program 2 hours	Watching part of the movie- 10 minutes "Life School" without any sound Writing dialogues for the characters according to the context Getting ready to act it out Acting out the movie
11 th Week	Studying on basic Phonetics Regular SAC speaking class program 2 hours	Studying on Short Vowel Words Studying on Blends and Digraphs Practice on a ready worksheet
12 th Week	English Speaking Test (Post-test) Critical Thinking Test (Post-test)	English Speaking Test (Post-test) Critical Thinking Test (Post-test)