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The Effectiveness of the use of Kagan Cooperative Learning Structures

"Timed Pair Share, Numbered Heads Together, and Talking Chips" in

the development of EFL university students' oral fluency

TRABAJO DE TITULACIÓN

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Dedication

I dedicate this thesis to my family, especially my mother and older sister who have patiently given me support, care, and love. They are a clear example of love and loyalty. I would also like to dedicate this thesis to my nephews who have recently started their university studies. I hope this work can serve as motivation to pursue important goals in their professional and personal lives.

Ana

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I would like to express my deep appreciation to all the instructors of this master's program, and especially to the Director of this research study, Mgtr. Nina Nesterenko. This master's program has helped me broaden my mind as an English instructor.

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ABSTRACT

The main objective of this research study was to determine the effectiveness of the use of three Kagan Cooperative Learning instructional strategies, *Timed Pair Share, Numbered Heads Together*, and *Talking Chips* in the development of EFL students' fluency in oral production. A second objective was to know the students' perceptions regarding the use of cooperative learning to develop their oral fluency. This study followed a mixed methods approach with a quasi-experimental design. The participants were university students taking an intermediate level intensive English course at a public university in Ecuador. Both the experimental and the control group had 21 students. For seven weeks, students in the experimental group worked with the three Kagan Structures. Data were collected through a pre-test and post-test, students' journals, teacher observation, and student survey. The results showed that the intervention had a positive effect on the development of the oral fluency of the experimental group. Consequently, this study recommends the incorporation of Timed Pair Share, Numbered Heads Together, and Talking Chips into the set of teaching strategies English instructors use to develop students' oral fluency.

Key words: oral fluency, Kagan structures, cooperative, learning

RESUMEN

Esta investigación tuvo como objetivo principal determinar la efectividad de tres estrategias de enseñanza del Aprendizaje Cooperativo de Kagan, *Timed Pair Share, Numbered Heads Together*, y *Talking Chips*, en el desarrollo de la fluidez oral de aprendices de inglés como lengua extranjera. Otro objetivo fue conocer las percepciones de los estudiantes sobre el uso del aprendizaje cooperativo en el desarrollo de la fluidez oral. Este estudio se basó en un enfoque de métodos combinados, con un diseño cuasi-experimental. Los participantes fueron estudiantes de un curso intensivo de inglés, nivel intermedio, en una universidad pública del Ecuador. Tanto el grupo de control como el experimental tuvieron 21 estudiantes. El grupo experimental trabajó con las estructuras Kagan por siete semanas. Los datos fueron recolectados a través de un pre-test, un posttest, diario, observación y una encuesta. Los resultados mostraron que la intervención tuvo un efecto positivo en el desarrollo de la fluidez oral en el grupo experimental. Se recomienda la utilización de *Timed Pair Share, Numbered Heads Together*, y *Talking Chips* en el desarrollo de la fluidez oral de estudiantes de inglés.

Palabras claves: fluidez oral, estructuras Kagan, cooperative, aprendizaje

INTRODUCTION

Currently, speaking English fluently has become a requirement for those Ecuadorian students who pursue a university degree or intend to start postgraduate programs within or outside Ecuador. This fact, plus the ineffectiveness of some teaching strategies traditionally used by English instructors, and the complexity of what oral fluency entails constituted the main reasons for conducting a research study on the effectiveness of the use of three Kagan Cooperative Learning Structures in the development of the oral fluency of a group of university English language learners.

In 2016, the Ecuadorian Higher Education Council stated a new requirement for the graduation of university students. In order to be considered eligible for graduation, students need to take a proficiency exam in a foreign language and reach a B2 level, according to the Common European Framework of Reference for the Teaching of Languages (República del Ecuador, Consejo de Educación Superior, 2016). Since English is the language most widely studied by Ecuadorian university students, instructors face the responsibility to equip themselves with teaching strategies that can help students become fluent speakers of the English language.

The responsibility of selecting the most effective strategies for helping students develop their oral fluency becomes even greater after analyzing the results of the evaluation of the English program at the public university where the current research was conducted. The evaluation was carried out in 2014, and its final report stated that the teaching strategies used by the English instructors to develop students' oral fluency were ineffective since they lacked a clear structure, were not motivating, and did not have a clear purpose (Meyer, 2015).

As far as oral fluency in a foreign language is concerned, it has multiple definitions that go from a focus on its temporal aspects to a holistic approach. This study conceives oral fluency from a holistic perspective involving elements as interaction with the interlocutors and the use of formulaic chunks and positive gambits for social interaction. These elements go beyond the traditional understanding of oral fluency as mainly concerned with speed of delivery, automaticity, and with pronunciation and lexico-grammatical accuracy.

This state of affairs led the researcher to set two specific objectives for this study. The first one was to determine the effectiveness of the use of three Kagan Cooperative Learning Structures "*Timed Pair Share, Numbered Heads Together*, and *Talking Chips*" in the improvement of a group of university English language students' fluency in oral production. The second objective was to know the students' perceptions about the use of cooperative learning in the development of fluency in their oral production.

According to Kagan (2013), in traditional classes, students are given one minute an hour of oral language production, and students do not have an equal participation while Kagan Structures have proven to help English language learners to develop their language skills more quickly and thoroughly than any other teaching strategies. In addition, Kagan and High (2002), claim that Kagan Structures have a series of benefits for the language class. First, there is greater comprehensible input since learners adjust their speech to the level of their partners. Second, students practice the language within a more natural context. Third, there is negotiation of meaning among the students working in a group. Fourth, students' affective filters are low since they feel less anxious when speaking the target language with their partners. Fifth, students receive peer support which enhances their use of the target language. Sixth, students feel motivated, and they have a greater use of the target language compared to a whole class activity. Similar studies support the benefits of using Kagan Structures in the development of English learners' oral production. Suwantarathip and Wichadee (2010) studied the effect of Think-Pair Share, Numbered Heads Together, and Peer Review on a group of 40 EFL Thai university students' English proficiency. The results indicated that the implementation of these three Structures resulted in an improvement of the students' English language skills. Another study conducted in Bangkok included high school students who worked with three Kagan Structures, and their involvement in the group activity as well as their use of the English language was higher than working with a traditional group work activity (Essien, 2015). Wada (2012) had used pair work and group work with his class, but he had noticed that his students did not work effectively as a group, so he decided to use Kagan Structures for one semester; one of these Structures was Numbered Heads Together. At the end of the semester, students were surveyed, and 93% of them reported having enjoyed working with them and their English scores increased significantly which resulted in the improvement of the learners' English language skills.

The implementation of this study involved university students taking English classes at the public university aforementioned, and its findings show that the benefits of using Timed Pair Share, Numbered Heads Together and Talking Chips to develop learners' oral fluency surpass the benefits of using traditional pair and group work. In addition, students reported the benefits of working in pairs and small groups where they had equal opportunity to use English to interact with their teammates and felt supported in their attempts to use English to complete group work. Consequently, the findings of this study constitute a contribution to the existing literature and will benefit the institution where the intervention took place. In addition, the positive results obtained through the application of the three cooperative learning instructional structures lead the

researcher to suggest the incorporation of these instructional structures to the bulk of teaching strategies used by teachers and instructors working with learners whose main goal is to become fluent speakers of the English language.

In regard to methodological limitations of this study, one of them is the short period of time the intervention took place. Seven weeks represent a short time to have definite results about the effectiveness of the use of the three Kagan structures in the development of the students' oral fluency. Furthermore, the cognitive effort demanded by the pre-test was very low compared to the post-test. This is explained by the fact that the pre-test included questions that students had repeatedly answered through the beginner and pre-intermediate levels, and the vocabulary needed was already part of the students' active vocabulary. On the other hand, the post-test included questions about topics that were relatively new to the students. This fact did not allow the researcher to compare the average grade obtained by the students in the pre-test with the average grade of the post-test.

CHAPTER I: LITERATURE REVIEW

Fluency in ESL/EFL learners' oral production

Linguists are unable to reach an agreement about what oral fluency in a second language means. Neither have they agreed on how oral fluency should be measured. As a consequence, there is a wide range of definitions of oral fluency. For the purpose of this study, definitions of oral fluency will be grouped according to two perspectives. The first one defines fluency from the perspective of speed of delivery and automaticity; that is to say, from temporal aspects, and the second one is broader and includes elements such as context and interaction among interlocutors.

Fluency as speed of delivery and automaticity:

Many authors have defined fluency from a temporal perspective where speed of delivery, pauses, and automaticity are the aspects used to measure it. According to Roberts and Kreuz (2015), *fluency* is a term used to indicate how well a person speaks a foreign language. For them, fluency refers to the speed, smoothness, and accuracy with which a person speaks. Similarly, for Ellis (2003, p. 342) fluency in oral production refers to "the extent to which the language produced in performing a task manifests pausing, hesitation, or reformulation."

Following the same perspective, Koponen and Riggenbach (2000) claim that fluency can be conceptualized in three different ways. The first one is *fluency* versus *accuracy* in which fluency refers to meaningful and spontaneous communication, while accuracy focuses on oral production that is grammatically correct. The same authors state that in some cases fluency is developed at the expense of accuracy. The second understanding of fluency focuses on temporal variables and hesitation phenomena, which means that it includes aspects such as speech rate, articulation rate, pause length, repetitions, false starts and corrections. The third conceptualization is fluency as the degree of automaticity of cognitive processes. Fluency as a cognitive process has two aspects. The first one "access fluidity" refers to the speaker's ability to connect words and expressions to their meanings. The second aspect is "attention control" which refers to a constant focus on the relationship between meanings. Another author that defines fluency from a temporal perspective is Lennon (2000) who considers that speed, smoothness, accuracy, and clarity are the elements of fluent speech.

All these definitions see fluency as an aspect of oral production that can be measured in terms of units of time. However, a learner can speak fast and without pauses but fail to make his message understood. In such a case, fluency, which is usually considered the ultimate goal in the development of second or foreign language proficiency, should include elements that go beyond speed of delivery, length of pauses, and automaticity.

Fluency beyond speed and automaticity:

In the last decades, some linguists have approached fluency from a more holistic perspective and have incorporated other elements to its study. McCarthy (2006) points out that traditionally linguists have assigned some idealized characteristics to fluency. These characteristics are mainly smoothness, natural rhythm, stress and speed; however, an analysis of native speakers' conversations shows that the characteristics attributed to fluent native speakers are mainly assumptions. This author makes an analysis of a conversation between native speakers and argues that their speech follows the lexicogrammatical principles, is continuous, does not have awkward pauses, does not present comprehension problems; however, their performance has some unfinished sentences, redundancies, hesitations, and pauses for recasting. In addition, native speakers do not necessarily speak fast and do not always have an ideal rhythm, and if the traditional

criteria assigned to L2 learners' fluency were applied to assess the native speakers' performance, their speech would be considered disfluent.

McCarthy (2006) goes further in his analysis and claims that three aspects are present in what can be considered a model of fluency. The first one is related to the traditional aspects attributed to fluency such as correct grammar use and word collocations, effortless use of accurate elements, and automaticity. The second element is the use of formulaic chunks which contributes to speed and conversational flow. These chunks can be of two types: high frequency and low frequency, and they contribute to the speakers' attainment of automaticity and effortless accuracy. These formulaic chunks can be categorized as sentence frames and as pragmatically specialized units. The former are frames used by the speakers by adding content. An example given by McCarthy is "you're gonna..." The latter are words or phrases that fulfill specific pragmatic functions. For example, "you know." These chunks are spoken quickly which contributes to phonological and lexico-grammatical fluency. The attached content can be spoken more slowly depending on the message. The third element that McCarthy considers part of fluency is represented by the interaction between the interlocutors. For McCarthy, fluency results from a mutual support between the speakers who cooperate to enable the flow of ideas, so fluency in conversation is not represented by an individual's talent but is the result of mutual support during the conversation.

McCarthy (2009) argues that in real speech, speed of delivery varies greatly depending on the context and on the complexity of the topic or genre. The same is said about pauses which in real speech vary according to the context and the cognitive effort that production may demand. Furthermore, McCarthy (2009) refers to studies conducted by various authors in the fields of psycholinguistics, sociolinguistics, and computer-

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human-interface science whose results show that people adjust their speed of delivery and pausing to that of the interlocutor. For McCarthy, the results of the study show that speed of delivery is an interactive aspect of discourse resulting from a joint work between speakers.

As far as automaticity is concerned, McCarthy (2009) argues that it also depends on the context; however, he argues that it cannot be denied that the automatic retrieval of language forms enables the speaker to produce language smoothly. He also underlines the role that chunks play in reducing time for processing language which in turn makes communication more efficient. This author goes on and claims that another important aspect of automaticity is the speaker's ability for turn-construction through the use of turnopeners and turnclosers. He also argues that the function of turnopeners is to construct a link that allows to have a flow of communication between what one speaker has said and what the turn is going to say. The interaction that turn taking implies during a conversation makes McCarthy propose the term *confluence* to refer to the joint work that takes place during turn taking. McCarthy gives a list of expressions and phrases that are commonly used as turnopeners and turnclosers and claims that their use shows reciprocity and convergence which in turn lead to the cocreation of fluency. This cocreation can take place in conversations while monologs are deprived from this essential part of a speech event.

An important contribution made to the definition of fluency comes from Mizera (2006, p. 14) who defines fluency as "the ability to spontaneously speak a language quickly and comprehensibly, without an undue number of formal errors that distract listeners from the speaker's message." This author explains why accuracy is part of fluency by stating that if a L2 learner's speech is fast but incomprehensible due to a high number of lexical, morphosyntactic, and pronunciation errors, that speaker cannot

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be considered fluent. This explanation is in line with what Murphy (1991) argues when he says that conversational fluency cannot sacrifice phonological accuracy. In addition, Mizera (2006) questions definitions of fluency that focus only on speed by arguing that context and speech task play an important role in fluency since it is not the same to repeat something that has been memorized than answer a difficult question.

Although this study focuses on L2 oral fluency, it is worth mentioning what Fillmore (2000) points out when referring to L1 speakers' oral fluency. According to him, fluency comprises four aspects. The first one refers to the ability to talk with speed avoiding unnecessary pauses. The second aspect refers to the ability to talk coherently through the use of complete sentences. The third characteristic refers to the ability to talk about different topics in different contexts. The fourth characteristic refers to the ability to use language creatively. Fillmore emphasizes the importance of context and of learning formulaic expressions or sentences that can promote fluency. Two examples of such utterances are "*Let me be the first to congratulate you and Anybody home*?"

An analysis of the above definitions clearly shows that linguists approach fluency from different perspectives. On one hand, fluency is defined and measured quantitatively based on speed of delivery and automaticity. In this group, morphosyntactic accuracy is a very important element in deciding if a speaker is fluent or not. On the other hand, a more holistic approach to fluency takes into account aspects that go beyond speed and automaticity and acknowledge that communication is an interactive event where interlocutors constantly assume the role of speakers and listeners and work jointly in order to make communication flow. This approach which is mostly qualitative favors the development of L2 learners' oral fluency through interaction where learners make use of semantic chunks. For this study, fluency will be approached holistically, and it will take into account aspects mentioned by Mizera (2006) and McCarthy (2009). Fluency in an L2 learner will consider the extent to which a learner is able to interact with his interlocutors by using comprehensible speech uttered at a speed rate that does not have long pauses that hinder understanding, and this speech will conform to the morphosyntactic and phonological principles of the target language.

Oral fluency development

There is some consensus on the strategies that can promote L2 learners' oral fluency. According to Roberts and Kreuz, (2015), overall fluency can be improved in two ways. First, by providing language learners with a wide range of opportunities to practice the target language. These opportunities should include different contexts and a variety of speakers. Second, another important element that improves fluency is through peer correction and feedback. This means that conversational partners must be asked to correct their peers and give suggestions on how to improve. These authors argue that by asking one's peer to signal mistakes and correct will prevent students' interlanguage from becoming fossilized, and the bases for a successful communication will be established. Similarly, Shumin (2002) adds that since EFL students learn the target language inside a classroom, teachers need to create an environment that promotes real interaction and where students can have a purpose to speak.

Brumfit (2000) advises L2 teachers using both accuracy building and fluency building activities in the classroom. The latter should involve students in activities where they can feel free to take risks and create their own utterances based on the input given either by the instructor or other sources. By doing so, students will be able to internalize target language forms studied in class. Once acquired, these forms will be used in fluent production. Correction should be kept at its minimum since students need to build their fluency. This last statement contradicts what Roberts and Kreuz, (2015) claim in relation to correction which implies that correction should be carefully treated in the classroom.

In the same way as there are factors that promote fluency, there are also factors that hinder oral fluency. Roberts and Kreuz (2015) state that trying to acquire a native like speaker's accent may represent an obstacle to oral fluency development since speakers' self-confidence is usually affected when trying to get rid of their accent. Consequently, as long as a student's accent does not represent an obstacle for understanding, which means if it is not heavily accented, to make it unintelligible, that speaker should embrace that accent which will result in an improvement of fluency and confidence. A study conducted by Yan (2001) claims that anxiety is one of the greatest inhibitors of L2 learners' oral fluency development since students are afraid of a negative evaluation of their speech, and in some instances, their self-concept is threatened when they feel forced to speak when their proficiency is limited. Classroom environments where teachers do not give students the opportunity to develop their creativity and use the target language actively lead to L2 learners' frustration. Similarly, Yan's study shows that task difficulty can lead to students' oral fluency inhibition, so teachers need to avoid assigning students tasks that are beyond their language learning level.

To sum up, L2 learners' oral fluency is more likely to develop if students have the opportunity to use the target language in pair and group work activities where they feel safe and motivated to use the target language. Language teachers should also expose students to different contexts through activities that promote interaction among them. In addition, students should feel motivated to take risks and use the language by incorporating new forms and structures presented by the instructor or other types of

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input sources. All these activities should have a purpose and should promote peer's support as a way to promote learning. The type of teaching and learning strategies needed to promote L2 learners' oral fluency fits into the principles of Cooperative Learning.

Cooperative Learning and Kagan Structures in the development of EFL learners' oral fluency

Based on the research on how oral fluency is better developed, there exists the need to search for teaching and learning strategies that best develop EFL learners' oral fluency. Cooperative Learning fulfills the requirements to a successful development of EFL learners' oral fluency, and more specifically, Kagan Structures, one of the approaches to Cooperative Learning.

According to Johnson (1991, p. 5), "cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning." This definition has two important implications in relation to how students best develop their oral fluency. First, through cooperative learning students practice the language in small groups where they have plenty of opportunities to interact with their peers. As it is claimed by McCarthy (2006) interaction is a very important element in oral fluency development. Second, students not only work in a group but also feel responsible for their peers' learning which implies that learners are going to provide their peers with feedback and in some cases corrections to their mistakes. This is in line with what Roberts and Kreuz, (2015) argue when they say that oral fluency is best developed through peer feedback. Another author that points out the role that interaction plays in language learning is Essien (2015). In addition, Johnson (1991) argues that cooperative learning brings very important benefits to the classroom since students achieve more, establish strong relationships with their classmates, and adjust easily to the classroom environment.

When comparing traditional group work with cooperative work in a foreign language class, some differences stand out. First, cooperative learning activities are well structured. Second activities have a clear purpose, and every student has an active participation. These three aspects correspond to what Shumin (2002) claims are requisites to promote the development of oral production when he says that students need to interact in a positive environment where every activity has a purpose.

There are various approaches to cooperative learning, and despite their differences, all of them share certain characteristics. First, the size of the groups can go from two to several members. Second, group members may have individual tasks, or all of them may work on the same task. Third, evaluation may be based on the group performance or by averaging the individual performance. An innovative and well known instructional approach to cooperative learning is Kagan Structures. What makes Kagan structures one of the most promising instructional strategies to develop oral fluency in EFL learners is explained below.

Kagan Cooperative Learning Structures

According to Kagan and High (2002), Kagan structures are instructional strategies that are highly structured and very easy to use. They originated from the theory and research on cooperative learning and are intended to promote engagement and cooperation among learners. Kagan (2014) explains that Structures describe step by step how learners interact among each other, how they interact with their teacher, and how they interact with the curriculum. Structures are based on educational principles that have been scientifically studied. Consequently, each step in a structure has a specific reason and should not be skipped since by doing so, the effectiveness of the

structure is compromised (Kagan, Kagan, & Kagan, 2016). An important aspect of Kagan structures is their difference with "activities." Kagan structures are content free which means that they can be used with any content, level, and stage of a lesson plan. On the other hand, activities usually have objectives bound to specific content (Kagan, 1989).

This definition has very important implications for oral fluency development in EFL learners. First, two of the main aspects of the Kagan structures are students' interaction and engagement. According to Brown and Attardo (2005), language learners' interaction leads to negotiation of meaning which in turn leads to L2 acquisition. These authors also state that interaction leads to output which represents an opportunity for the students to try out new language becoming aware of the gap between what they intend to say and what they really say. Similarly, Wright (2010) points out the importance of interaction when he says that meaningful interaction is one of the conditions for second language acquisition. As for engagement, this aspect is directly related to motivation, and according to Richard-Amato (2003), learning a second language would be unlikely without motivation.

Types of structures

There is a wide range of Kagan structures, and this variety responds to their different functions and domains of usefulness in a lesson. Thus, Kagan structures can be classified according to the academic domain, cognitive domain and social domain they are more suited for. As far as the academic domain is concerned, some structures can be more appropriate to work with certain subject areas, contents and objectives. For example, some can be very useful for vocabulary development, expressing opinions, review, presentation and acquisition of new material, and assessing prior knowledge among others. Regarding the cognitive domain, some structures can be excellent to

work with convergent thinking, which corresponds to knowledge-level thinking where students basically have to memorize different facts. Others can be very useful for divergent thinking which corresponds to application-level thinking where students have to practice their analysis, evaluation and synthesis skills. In relation to the social domain, some structures can be more useful for developing conflict resolution skills, presentation skills, communication skills, teambuilding skills, role taking, involvement, tutoring, praising and others (Kagan, 1989).

Benefits of using Kagan structures over traditional language teaching

The benefits of using Kagan Structures over traditional teaching can be outlined based on the four basic principles of Kagan Cooperative Learning.

Positive Interdependence

According to Brandt (1989) and Kagan and High (2002), the traditional class is based on a question answer structure where students compete to gain their teacher's attention and recognition which creates a negative interdependence among them. In this type of class structure, the teacher asks a question, and students raise their hands. Then the teacher chooses one student who gives an answer. If the answer is incorrect, students raise their hands again in their attempt to be called on by the teacher. The failure or incorrect answer of a student represents an opportunity for the other students to be taken into account by the teacher. This type of traditional question answer structure fails to create positive interdependence among students since students compete against each other in order to stand out and gain their teacher's praise. On the other hand, with Kagan structures students work together to achieve a common goal, and by doing this, they learn cooperatively by exchanging information, evaluating one another's ideas, and supporting and monitoring one another's work. Each student's success implies the group's success. Students encourage each other and feel active members of a team. Structures are designed in such a way that a task cannot be completed by one single individual, but it has to be the work of all members. Teachers assume the role of facilitators of the students' learning.

When this principle is applied to an EFL classroom, students make a real use of the language to interact with their team members. In addition, Kagan and High (2002) point out that the use of Kagan structures has a series of benefits for the language class. First, there is greater comprehensible input since learners adjust their speech to the level of their partners. Second, students practice the language within a more natural context. Third, there is negotiation of meaning among the students working in a group. This corroborates what McCarthy (2006) and Roberts and Kreuz (2015) state regarding the classroom requirements for the development of L2 learners' oral fluency.

Furthermore, according to Kagan (2014), social interaction boosts the work of the human brain, and students become more creative, thoughtful, and receptive. In addition, Kagan structures create social safety since students follow clear rules of respect for individual differences which helps them explore the use of the new language without fear of rejection. As a result, students are more expressive and open for giving and receiving feedback which in turn leads to oral fluency development.

Individual Accountability

In the traditional group work activities, one or two students, usually high achievers, complete the task while the other students in some cases only listen and in other cases do not participate in the activity either because it is beyond their current level of L2 development or because they feel inhibited by their group mates. Contrarily to what happens in a traditional class, Kagan structures draw on students' various skills, talents, and backgrounds to accomplish a task. The learning of the material is each student's responsibility as well as it is supporting their teammates to learn the new

material (Kagan, 2014). Students are not given the option of not participating (Kagan & High, 2002). As Cohen, Brody and Sapon-Shevin (2004) assert, in cooperative learning students alternate their roles of learners and teachers within the group. According to Johnson and Johnson (1994), each member of the group has to contribute fairly to the group's success.

As far as EFL learners' oral fluency development is concerned, each student feels motivated to use the language and has enough practice, preparation and team support before performing in front of the entire class (Kagan, 2014). This corresponds to what Murphy (1991) claims is necessary for developing oral fluency when he says that students need considerable practice through the use of semi-controlled activities that allow them to express themselves fluently. Furthermore, According to Kagan (1995, 2013), language learners receive comprehensible input from their teammates, have more opportunity to produce output, and they interact in a supportive context where they are not afraid of trying on new language.

Equal Participation

Kagan and High (2002) point out that in a traditional classroom usually the students who do not need much practice with the second language are the ones who participate the most, while the least fluent and the least outgoing students are the ones who do not participate. This results in an unequal participation of the students. Kagan structures are carefully designed in order to have an equal participation of all students.

When this principle is applied to the development of EFL students' oral fluency, Kagan and High (2002) assert that Kagan structures can be easily adapted to heterogeneous level classes, so all students can make an active use of the language. Students who are in the intermediate fluency and fluency stages of second language acquisition, benefit from the use of Kagan structures not only in the practice and development of their oral fluency but also in the development of their higher level thinking skills. Students can also master content and develop their language skills at the same time. Moreover, in Slavin's (2013) view, the traditional competitive classroom becomes a cooperative classroom by introducing the principles of cooperative learning. This implies that high achievers support low achievers in their learning, and this helps prevent problems related to self-esteem and anxiety which are inhibitors of language learning.

Simultaneous Interaction

Kagan and High (2002) state that in a traditional classroom, students' production of the language is kept at a minimum since while one student is called on by the teacher to speak, the rest has to listen. This means that each student has few opportunities to practice the target language. On the other hand, with Kagan structures, students work in groups of two or four, and their production of the language increases dramatically. Additionally, the structures have steps that promote simultaneous interaction and the EFL learner's willingness to communicate increases. Thus, according to Derwing, Munro and Thomson (2008), the learners' willingness to communicate constitutes an important prerequisite for effective interactions and oral fluency development in the language class. These three authors also argue that language teachers should give students opportunities to speak since the absence of these opportunities deprive students from the benefit of input, feedback, and self-reflection on their production.

All Kagan structures incorporate the four principles of cooperative learning which are better known by the acronym PIES.

Kagan structures and oral fluency development

According to Kagan (1995), language acquisition takes place in a context that is supportive and motivating which means a context where students support mutually and

work towards a common goal. This context also needs to be communicative and referential which means that students need to speak about real events and objects, about things that are taking place in the moment of speaking. Another characteristic of this context is that it has to be developmentally appropriate which means that by working in groups, students have the opportunity to produce contextualized speech, and in this way they have more opportunities to produce discourse that is more appropriate to the level of their development. This context also needs to be rich in feedback which is made possible through peer interaction. Thus, according to the author aforementioned, in 20 minutes of cooperative interaction, a student might receive plenty of feedback that is easy to assimilate and in a natural context.

Three Kagan Structures: Timed Pair Share, Numbered Heads Together, and Talking Chips and oral fluency development

A description of the functions and steps of the three Kagan structures is given in order to explain the benefits of their use in the development of English language learners' oral fluency.

Timed Pair Share

Timed Pair Share is one of Kagan cooperative learning structures that helps language learners develop their oral fluency. First, teacher presents a topic for discussion or a question, and students are paired. Then students take turns to present their opinions. While one of the students is speaking, the other student in the pair listens actively by using eye contact, semantic chunks, nods, and smiles. Then the other student takes his turn to speak by elaborating his opinion on what the other student has said. Each response is timed, so every student has equal time for speaking. This structure has many functions. First, it promotes the development of the students' social skills and communication skills. Second, in the academic domain, it enables language learners to process information and to develop their thinking skills. In addition, students practice self-expression, consensus seeking, praising. Timed Pair Share is excellent for activating prior knowledge and for closing a lesson segment and summarizing what each student has learned. All of these are elements that promote oral fluency development (Kagan, 2014; Kagan et al., 2016).

Kagan (2014, p. 3.36) recommends giving students a list of what he calls "positive gambits" such as "I enjoyed listening to you because...," "Thank you for sharing," or "What I learned from you is..." By using these sentence starters and sentences, teachers equip students to build social skills among them.

Numbered Heads Together

Numbered Heads Together is another Kagan structure that has very important characteristics that promote the development of oral fluency in foreign language learners. First, teacher sets students in groups of four, and each student is numbered from one to four. It is recommended to form groups that have heterogeneous level students. Then teacher asks either a high consensus question or a low consensus question that generates discussion, or teacher can give a problem to be solved by the students. Second, each team member writes his or her own answer, and then all students in the group discuss their answers with their teammates. Then teacher calls on a number, and the student with that number represents the group and gives the group answer to the question or summarizes the group discussion. This structure has very important functions. First, it promotes the development of teambuilding, social, and communication skills. In addition, it promotes knowledge building, procedural learning, processing information, and thinking skills (Kagan, Kagan & Kagan, 2016).

Talking Chips

Talking Chips is a Kagan cooperative learning structure that builds language learners' oral fluency. The first step in this structure consists on forming groups of four, and each student receives a tangible item that works as a talking chip. Then teacher gives students an open-ended discussion topic. After this, students start speaking one at a time. To take a turn, a student has to place his or her talking chip in the center of the table and cannot take it back until all the team members have taken their turns to speak. After all the teammates have had their turn, the talking chips are given back to the students, and a second round starts. Teacher can give a time limit for each contribution to the discussion. This structure has the function of developing interpersonal skills through the practice of teambuilding, social skills, and communication skills. Further, students process information and build knowledge as part of its academic function (Kagan et al., 2016). This structure also has the function of being a communication regulator and fluency builder (Kagan, 2009).

The three aforementioned Kagan structures incorporate the four principles of cooperative learning, positive interdependence, individual accountability, equal participation, and simultaneous interaction, as well as other important elements for building oral fluency in EFL learners, mainly motivation and feedback. First, students practice positive interdependence since they help each other to communicate their ideas and opinions in a low anxiety classroom environment. Students feel responsible for their teammates' learning and support them to use the language to speak. There is real interaction in each group, and language learners practice the language equally. In addition, team members provide immediate feedback. Interaction, speaking practice, purpose for speaking, and feedback are very important requirements for the development of oral fluency as it is pointed out by Brumfit (2000), McCarthy (2006), Roberts and Kreuz (2015), and Shumin (2002).

In addition, all students in the groups have equal opportunity to use the target language to express their ideas and opinions and share information with their teammates. Students have the opportunity to listen actively to their peers and encourage them to express their ideas. This helps low level students use the target language to express their ideas while high level students scaffold their learning. Similarly, every student feels responsible for contributing to the group work and representing the group. This is complemented by the equal participation and simultaneous interaction that takes place in the classroom when each student takes turns to speak for a limited time, and all of them have a clear goal. These are elements that Slavin (2011) considers essential for learning and for students' achievement.

There is limited research about the effectiveness of using Timed Pair Share, Numbered Heads Together, and Talking Chips in the development of L2 learners' oral fluency. However, the few studies that have been conducted support the benefits of their use in language classes. For example, Suwantarathip & Wichadee (2010) studied the effect of Think Pair Share and Numbered Heads Together on a group of 40 EFL Thai university students' English proficiency. The results indicated an improvement of the students' English language skills after the implementation of these structures. Wada (2012) implemented the use of Numbered Heads Together among other Kagan structures with Japanese students for one semester and reported a significant improvement on their English learners' achievement.

Assessing oral fluency

Consistent with the multiple definitions of fluency, there are also multiple forms of assessing EFL learners' oral fluency. These different forms of assessment can be grouped as belonging to what can be called as a quantitative approach and a second group that can be considered more qualitative or holistic. An example of the first approach is described by Koponen and Riggenbach (2000). According to these authors, some methods to measure fluency have been developed. The first one is "breakdown fluency" which is measured based on the number and length of unfilled and filled pauses and silence. The second one is "repair fluency" which is measured based on the frequency of reformulations, replacements, repetitions, and false starts. The third one is "speech rate" measured by the number of words in a specific time frame. The fourth is "automatization" which is measured according to the lengths of runs. McCarthy (2009) claims that when fluency is measured in terms of speed of delivery and automaticity, the number of words per second managed by the student and the length of pauses are considered to compare fluent from nonfluent speakers.

Fluency can also be focused on a holistic way. According to Mizera (2006), a holistic approach to measuring fluency takes into consideration factors such as pronunciation, vocabulary size, and morphosyntactic accuracy. For Koponen and Riggenbach (2000), a holistic approach to assessing fluency implies that fluent speakers are expected to communicate at length with a natural flow which implies that the speech produced should be free of hesitation and unnatural pauses.

In reference to the first approach to the assessment of fluency, McCarthy (2009) argues that oral fluency is usually assessed through the use of measures that focus mostly on speed of delivery, pauses, and automaticity. These instruments fail to acknowledge the role that context and interaction among speakers plays in oral fluency. This author analyzes what the Common European Framework of Reference (CEFR) states for assessing oral fluency, and says that it focuses on speed, pauses, and automaticity, and it acknowledges the interactive characteristic of fluency but vaguely. McCarthy refers to ongoing studies on fluency to show the effects of interaction on the

increase of language learners' fluency. Thus, the support that an interlocutor can give a speaker in a monologue through backchannel responses has a positive impact on the speaker's fluency. In the same token, in a real life conversation, all speakers contribute to filling silences. However, when an interlocutor in a monologue or interview, does not contribute to filling silence, the speaker has an extra cognitive load to try to fill the silences. Similarly, Kormos (2004) researched the differences between fluent and nonfluent L2 learners and the native and nonnative perceptions of fluency. The results showed that speed of delivery and accuracy are the most important indicators of L2 learners' fluency.

A combination of temporal and holistic assessment seems to give a clearer picture of the degree of fluency a L2 learner has achieved. The use of monologs to assess fluency through picture descriptions or narrations can provide teachers relevant information related to the degree of fluency a L2 learner has achieved. However, real life situations demand the interaction with different speakers in different situations. Consequently, the measurement of temporal variables such as speed of delivery and morphosyntactic accuracy should be complemented with the observation of L2 learners in group work where turn taking, use of semantic chunks, positive gambits, and fillers can be taken into account.

CHAPTER II: METHOD

Setting and participants

Data for the study were collected from 42 students enrolled in intermediate level intensive English courses at a public higher education institution in Ecuador. Each English course comprised 70 in-class hours which were spread over seven weeks, from May 15th to June 29th. Students had ten hours of class instruction per week. The students' intrinsic motivation to learn the language was high, and this course was not mandatory for them. There were a control and an experimental group. Each group had 21 students. The average age of the students in the control group was 21 and 23 in the experimental group. Students were selected based on a convenience sampling.

Approach

This research study was based on a mixed methods approach that followed a quasi-experimental design.

Procedure

This study intended to know to what degree the use of three Kagan Cooperative Learning Structures, *Timed Pair Share*, *Numbered Heads Together*, and *Talking Chips* improved English language learners' fluency in oral production. It was also important to collect information about the students' perceptions regarding the use of cooperative learning in the development of their oral fluency. The research process started with an extensive literature review that focused on the different definitions given to oral fluency in the last decades, what research said about the best ways to develop English learners' oral fluency, and most importantly, research studies conducted on the effectiveness of Kagan Cooperative Learning Structures in language learning and oral fluency development.
Once the literature review was completed, the intervention process started. On the first day of classes, the participants received an explanation about the details of the research project and the role of the control and experimental groups. The students in both groups received the informed consent forms (see annex 8) for their reading and signing. It was made clear that the students' participation in the research study was voluntary and their denial to participate in it did not bring any negative effects to their grading and role in the class. They also received a list of chunks and positive gambits (see annex 6) for their use during pair and group interaction as recommended by Kagan (2014). The instructor asked students to have this list with them at all times during pair and group work. These formulaic expressions had the purpose to contribute to the development of students' oral fluency and social skills. Teacher modeled the use of these chunks and positive gambits since according to Kagan and Kagan (2009), modeling is brain based learning and constitutes a very effective strategy to promote students' learning.

The experimental group worked with the Kagan structures three times per week while the control group worked with traditional pair and group work. Both groups followed exactly the same syllabus. An example of the procedure followed in each class is presented in annexes as well as a general list of the dates, name of the Kagan structure, and topics of the classes.

Different tools were used to collect data and raise the validity of the study. First, in order to measure the effect of the three Kagan structures on the development of the students' fluency in oral production, both groups took a pre-test (see annex 1). The purpose of the pre-test was to assess the student's oral fluency. This pre-test consisted of an oral interview that included five open-ended questions. These questions were about familiar topics related to the students' majors, reasons for studying English, benefits of learning this language, and skills that presented the most difficulty to the students. Two English instructors, the researcher and a colleague participated in this activity, and they used a rubric (see annex 2) to assess and score the students' fluency over 10 points. The first three categories of the rubric referred to the traditional elements used to measure students' oral fluency as smoothness to use the target language during communication, pronunciation and grammar accuracy and length of pauses. The other two categories referred to the use of formulaic chunks and to the use of positive gambits during interaction with the interlocutors. One of the instructors performed the role of interlocutor who encouraged the student to speak while the other acted as the assessor and concentrated on evaluating the students' performance as recommended by Ekbatani (2011). The students' interview was recorded for future review.

In addition, an observation sheet (see annex 4) was used by the researcher, who was the instructor of the class, to assess the students' development of their oral fluency while they were working in pairs and in groups with the three Kagan Cooperative Learning Structures: Think Pair Share, Numbered Heads Together, and Talking Chips. The observation sheet had a section for reflective fieldnotes. The information collected was intended to be a formative type of assessment. The observations were conducted weekly.

Furthermore, student journaling was used. The purpose was to record students' reflections and perceptions on their performance and participation while working with the Kagan Cooperative Learning Structures. The students' reflections were guided by the teacher through the presentation of questions (see annex 3), and students wrote entries three times per week after working with the Kagan structures

At the end of the seven weeks of the study, both the students in the experimental and in the control group took a post-test. This post-test consisted of an interview that

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included five open-ended questions. These five questions were about topics that both groups of students had discussed in class. The same rubric used for the pre-test was used with the post-test, and the evaluators were the same as the pre-test. The results of the post-test of the experimental and control group were compared in order to see possible improvements in both groups.

Also, a student survey was used with the experimental group in order to know the students' perceptions regarding their work with cooperative learning in the development of their fluency in oral production. A questionnaire with five Likert items (see annex 5) was used. This questionnaire was administered on week 7.

The quantitative data were tabulated through the use of tables, and they were represented through graphics. In the case of the qualitative information, it was grouped according to questions in the case of the students' journals. The descriptive fieldnotes of the teacher observation were tabulated through tables, and the reflective fieldnotes were categorized according to their importance for recording the students' and teacher's needs and behavior during the work with Timed Pair Share, Numbered Heads Together and Talking Chips.

The data collected through the different tools were triangulated in order to increase the validity of the results of this study.

CHAPTER III: RESULTS AND DISCUSSION

The results of the pre-test applied to both the experimental and control group are

shown through the tables and graphics below.

Table 1 Results of the pre-test administered to the experimental group $= 21$ stude	ents
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Rating scale: 2= excellent 1.5= very good 1= good 0.5= poor 0= no production

Categor y	Student commu easily w interloc	nicates /ith utor	Speech comprel with acc pronunc and synt	is nensible curate riation tax	Pauses a	are short	Student chunks a formulat expressi promote	uses and ic ons that fluency	Student positive gambits interact	uses during ion
	Numbe r of student s	Percent age	Number of students	Percent age	Number of students	Percent age	Number of students	Percenta ge	Numbe r of student s	Percent age
Excelle nt	11	52%	1	4.76%	12	57%	0	0%	0	0%
Very good	4	19%	11	52%	4	19%	0	0%	0	0%
Good	4	19%	7	33.33 %	5	23.8%	2	9.5%	0	0%
Poor	2	9.5%	2	9.5%	0	0%	0	0%	0	0%
No product ion		0%	0	0%	0	0%	19	90.47%	21	100%
Total	21	100	21	100%	21	100%	21	100%	21	100%

Source: Results of the pre-test, experimental group Author: Ana Loja



Figure 1: Results of experimental group pre-test Source: Results of the pre-test, experimental group Author: Ana Loja **Table 2** Results of the pre-test administered to the control group = 21 students

Rating scale: 2= excellent 1.5= very good 1= good 0.5= poor 0= no production

Categor y	Student commu easily w interloc	nicates vith utor	Speech comprel with acc pronunc and sym	is nensible curate ciation tax	Pauses a	are short	Student chunks a formulat expressi promote	uses and ic ons that fluency	Student positive gambits interact	uses during ion
	Numb er of studen ts	Percent age	Numbe r of student s	Percent age	Numbe r of student s	Percent age	Numbe r of student s	Percent age	Numb er of studen ts	Percent age
Excelle nt	10	47.60 %	1	4.76%	11	52.38 %	2	9.5%	1	4.76%
Very good	6	28.57 %	13	61.9%	5	23.80 %	4	19%	2	9.5%
Good	5	23.80 %	5	23.80 %	4	19%	2	9.5%	1	4.76%
Poor	0	0%	2	9.5%	1	4.76%	2	9.5%		0%
No product ion	0	0%	0	0%	0	0%	11	52.38%	17%	80.95 %
Total	21	100	21	100%	21	100%	21	100%	21	100%

Source: Results of the pre-test, control group Author: Ana Loja



Figure 2: Results of control group pre-test Source: Results of the pre-test, control group Author: Ana Loja

The analysis of these results shows important similarities and some minor differences in the level of development and characteristics of the student's oral fluency. First, it is important to mention that this analysis is based on a holistic approach to fluency which considers it as encompassing aspects that go beyond speed of delivery and automaticity. Thus, the rubric designed for assessing students' oral fluency included aspects as smoothness, pronunciation and syntax accuracy, use of chunks and formulaic expressions, analysis of pauses and interaction with the interlocutor through the use of positive gambits as it is suggested by McCarthy (2009).

Second, an analysis of the first category in the rubric (Student communicates easily with interlocutor) shows that 19 students in the experimental group (90%) communicated easily with their interlocutor while two (9.5%) had difficulty expressing their ideas and information. This contrasts with the results of the control group since none of the students in the control group had difficulty speaking about their majors and reasons for taking English classes. Third, the category regarding the accuracy of the language produced shows that the English produced by 19 students (90%) in the experimental group was accurate both in syntax and in pronunciation, and only two students produced language with a significant number of pronunciation and syntactic mistakes that hindered comprehension and communication. Similarly, 19 students in the control group (90%) produced accurate language while two students produced very poor English in terms of syntax and pronunciation. The language of these two students in the control group deserves some analysis since these students were able to speak smoothly; however, their language had syntactic and pronunciation mistakes. If fluency were defined in terms of speed of delivery and automaticity as Ellis (2003) does, these two students would be considered fluent, but Lennon (2000), Mizera (2006), and Roberts and Kreuz (2015) underline the importance of grammatical and phonological accuracy as a very important element of fluency, and for them these students would be delivering their speech at a correct speed, but would be failing at making their speech comprehensible. Consequently, they would not be considered fluent.

As far as pauses are concerned, none of the students in the experimental group showed long pauses that interfered with communication, and only one student in the control group showed long pauses that made communication difficult. It is worth mentioning that the questions that students had to answer did not represent a high degree of difficulty in terms of understanding since students were familiar with the topic, and the cognitive effort demanded by the answers was not high since the vocabulary needed was basic and was already part of the students' repertoire. This fact may explain why students in both groups did not have to make long pauses to answer the questions and corroborates what McCarthy (2009) says regarding the influence that the complexity of a topic or genre has on the type of pauses a speaker makes in real speech.

In relation to the use of chunks and formulaic expressions, according to McCarthy (2006), these are words, phrases, or frames used by speakers during communication, and they contribute to enhance the speaker's speed of delivery and lexico-grammatical fluency. Eight students in the control group (38% of the students in the class) made a very good use of these phrases, and the most common chunks they used were *well*, *let me see*, *Can you*...? Two students tried to use chunks but did not use them properly, and the majority of students, 52% did not make any attempt to use chunks in their speaking. Regarding the experimental group, only two students, 9.5% made a correct use of chunks, and the majority 90.5% did not make any attempt to use them. This difference in the use of chunks between the two groups can be explained by analyzing different factors such as the instructors that those students had in their previous English courses, but these would be only assumptions and are not the focus of this study.

An analysis of the students' use of positive gambits to promote social interaction shows that four students in the control group (19%) made a good use of positive gambits to promote social interaction. These gambits were mainly the phrases *that's nice!, that's a good idea*. None of the students in the experimental group used positive gambits for social interaction during the interview despite the modeling of their use

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made by the instructor during the interview. It can be speculated that these students had not had the opportunity to practice their use and incorporate them to their vocabulary.

In brief, the results of the pre-test of both groups showed that the majority of students (90%) were able to talk easily about a familiar topic, and the language used was mostly accurate in pronunciation and syntax. Additionally, students' speech in both groups did not have long pauses that could interfere with comprehension. A common characteristic between the two groups was the lack of the use of expressions (positive gambits) that could promote social interaction. In addition, both groups had a very low use of chunks which have the function of making communication more efficient since they help speakers to process language more quickly as Fillmore (2000) and McCarthy (2009) state. However, a detailed analysis of the use of chunks made by the two groups shows that the control group had more students, 38%, who were able to make an active use of formulaic expressions during oral production. This fact is of special importance since one of the key categories in assessing students oral fluency was the use of chunks and positive gambits. As McCarthy (2006) states fluency is the result of a joint work between the interlocutors who support each other to enable the flow of ideas and information.

The results of the weekly observations that were conducted in order to monitor the progress in the development of the oral fluency of the students in the experimental group during the seven weeks of intervention are presented in two forms. The results of the data collected through descriptive fieldnotes are presented through tables and graphics, and the reflective fieldnotes are presented in the form of commentaries. **Table 3** Results of teacher's observation during experimental group students' pair and group work, week 1.

Category	Always	Most of the time	Sometimes	Rarely	Never
Students use English to interact with their teammates.		1,5			
Students use chunks and positive gambits during interaction.				0,5	
Students interact and support their teammates with phrases that encourage communication.			1		
Students focus on producing comprehensible texts, free of common syntax and pronunciation mistakes.		1,5			
Students rehearse their oral presentation avoiding long pauses.		1,5			

Rating scale: 2= always 1.5= most of the time 1= sometimes 0.5= rarely 0= never

Source: Observation descriptive field notes, week 1 Author: Ana Loja



Figure 3: Observation of experimental group pair and group work, week 1 Source: Observation descriptive field notes, week 1

Author: Ana Loja

The tables and figures show the frequency with which students displayed the behavior stated in the categories of the observation sheet (see annex 4) during their first week of working with the three Kagan Cooperative Learning structures. Regarding the first category that refers to the frequency with which students used English to interact with their teammates, the table shows that they did it most of the time. They also focused on pronunciation and lexico-grammatical accuracy most of the time. Students were allowed to use their cellphones to access online dictionaries to check the pronunciation of words, and they also had a list of common mistakes they had to avoid while constructing texts. Similarly, most of the time, they focused their attention on avoiding long and unnecessary pauses. However, only a few students made use of chunks and positive gambits during peer interaction. These phrases were not part of their repertoire, and the concept of establishing social interaction during communications with their teammates was new to them. The instructor had to model the use of such chunks and phrases and explained the importance of using them to make speech more natural as it is recommended by Kagan (2014).

The information collected through the reflective fieldnotes during the first week of intervention shows that students had difficulty understanding the concept of a "talking chip" and taking turns to speak, and it seemed even more difficult for them to build up their opinions on their classmates' comments and contributions. The instructor had to remind students constantly about the use of chunks and positive gambits learned in class. Students turned to Spanish constantly and were reminded about the importance of using English during group interaction. Students were not familiar with group grading, and it seemed to cause some stress among the group members. **Table 4** Results of teacher's observation during students' pair and group work, week 2.

Category	Always	Most of the time	Sometimes	Rarely	Never
Students use English to interact					
with their teammates.		1,5			
Students use chunks and					
positive gambits during					
interaction.				0,5	
Students interact and support					
their teammates with phrases					
that encourage communication.			1		
Students focus on producing					
comprehensible texts, free of					
common syntax and					
pronunciation mistakes.		1,5			
Students rehearse their oral					
presentation avoiding long					
pauses.		1,5			

Rating scale: 2= always 1.5= most of the time 1= sometimes 0.5= rarely 0= never

Source: Observation descriptive field notes, week 2 Author: Ana Loja



Figure 4: Observation of experimental group pair and group work, week 2 Source: Observation descriptive field notes, week 2

Author: Ana Loja

A comparison of the frequency of the students' behavior during pair and group work on week 2 shows that there was not a marked change in the students' practice and development of their oral fluency. Based on the importance of student interaction, speaking practice, and feedback as requisites for oral fluency development as stated by Brumfit (2000), Shumin (2002), and Slavin (2011), students were reminded about the importance of using English to interact with their partners as well as their contribution to the completion of the task. The oral presentation of the task was more elaborate and reflected teamwork.

The reflective fieldnotes of the second week show that students were very engaged in interacting with their teammates and on producing comprehensible and correct language. During the second week, it was not necessary for the instructor to model the use of chunks and positive gambits. An oral reminder was enough.

Table 5 Results of te	eacher's observation	during students'	pair and gro	oup work, week 3.
		0		

Rating scale: 2= always	1.5	= most of the	e time	1 = sc	ometimes	0.5 = rai	rely
0= never							

Category	Always	Most of the time	Sometimes	Rarely	Never
	ý				
Students use English to interact					
with their teammates.		1,5			
Students use chunks and					
positive gambits during					
interaction.			1		
Students interact and support					
their teammates with phrases					
that encourage communication.		1,5			
Students focus on producing					
comprehensible texts, free of					
common syntax and					
pronunciation mistakes.		1,5			

Students rehearse their oral			
presentation avoiding long			
pauses.	1,5		

Source: Observation descriptive fieldnotes, week 3 Author: Ana Loja



Figure 5: Results of teacher's observation, week 3 Source: Observation descriptive fieldnotes, week 3 Author: Ana Loja

During week three, the table shows that students' use of English to interact with their classmates became steadier, and their use of chunks and positive gambits increased in frequency from almost never to sometimes. Some students even did not need to be reminded to do so. In addition, most of the time students encouraged their classmates to continue talking through the use of formulaic expressions. It was evident that students felt more relaxed and self-confident during pair work and group work. However, there were students who turned to Spanish whenever they considered it was easier to explain some ideas in their mother tongue. The reflective fieldnotes evidenced students' engagement in the sharing and negotiation of information. Students were reminded to use chunks such as *I suggest... Why don't we...* while negotiating information to answer teacher's question. This reminder was conducted through modeling. Teacher approached each group and modeled the use of chunks and positive gambits for social interaction.

Table 6 Results of teacher's observation during students' pair and group work, week 4.

Rating scale: 2= always	1.5 = most of the time	1 = sometimes	0.5 = rarely
0= never			

Category	Always	Most of the time	Sometimes	Almost never	Never
Students use English to interact with their teammates.		1,5			
Students use chunks and positive gambits during interaction.			1		
Students interact and support their teammates with phrases that encourage communication.	2				
Students focus on producing comprehensible texts, free of common syntax and pronunciation mistakes.		1.5			
Students rehearse their oral presentation avoiding long pauses.		1,5			

Source: Observation descriptive fieldnotes, week 4 Author: Ana Loja



Figure 6: Observation of experimental group pair and group work, week 4 Source: Observation descriptive notes, week 4 Author: Ana Loja

During week four, students' interaction in the target language became the norm during their pair and group work, as it is shown by the frequency in table 6. Students also progressed in the use of chunks and positive gambits during interaction.

The reflective fieldnotes showed that the topic of this week "Human vs. Animal Community" demanded from the students the use of new vocabulary, and this may have led students to make repetitive questions to the teacher in order to accomplish their tasks. The student-teacher interaction was totally in English, and students started producing speech almost effortlessly.

Table 7 Results of teacher's observation during students' pair and group work, week 5.

Category	Always	Most of the time	Sometimes	Almost never	Never
Students use English to interact					
with their teammates		1,5			
Students use chunks and					
positive gambits during					
interaction.		1,5			
Students interact and support					
their teammates with phrases					
that encourage communication		1,5			
Students focus on producing					
comprehensible texts, free of					
common syntax and					
pronunciation mistakes	2				
Students rehearse their oral					
presentation avoiding long					
pauses.	2				

Rating scale: 2= always 1.5= most of the time 1= sometimes 0.5= rarely 0= never

Source: Observation descriptive fieldnotes, week 5 Author: Ana Loja



Figure 7: Observation of experimental group pair and group work, week 5 Source: Observation descriptive notes, week 5 Author: Ana Loja

During week 5, students' pair and group work was characterized by near-like automaticity in the use of expressions that promote social interaction and rapport between the teammates which confirms what McCarthy (2009) claims when he says that the use of chunks makes communication more efficient. During the presentation of tasks, students presented questions, and these questions were introduced by phrases that promote politeness, respect and acknowledgement of the partners' ideas and points of view. Some of these expressions were "Your presentation is very interesting and ..." "You have made a very good point...." "Congratulations on your presentation and ..." This is in line with what Kagan (2014) identifies as one of the benefits of cooperative learning and Kagan structures when he says that they create social safety which leads students to be more expressive and open resulting in their oral fluency development.

The reflective fieldnotes marked a salient characteristic observed during students' group work. It was the use of pragmatic phrases for turn taking. For example, it was common to hear students say "Sorry to interrupt, but I would like to add" This made the use of the English language more vivid.

Table 8 Results of teacher's observation during students' pair and group work, week 6.

Rating scale: 2= always	1.5 = most of the time	1= sometimes	0.5 = rarely
0= never			

Category	Always	Mos of the time	Sometimes	Almost never	Never
Students use English to interact with their teammates		1,5			
Students use chunks and positive gambits during interaction.		1,5			

Students interact and support			
their teammates with phrases			
that encourage communication	2		
Students focus on producing			
comprehensible texts, free of			
common syntax and			
pronunciation mistakes	2		
Students rehearse their oral			
presentation avoiding long			
pauses.	2		

Source: Observation descriptive fieldnotes, week 6 Author: Ana Loja



Figure 8: Results of teacher's observation, week 6 Source: Observation descriptive notes, week 6 Author: Ana Loja

During week six, students showed a marked improvement in the quality of the interaction among teammates. Students felt at ease when using English to communicate their ideas to their group members. All students were engaged in the group conversations and discussions and made use of formulaic expressions that sounded more and more natural. These findings are supported by Kagan (2009) when he argues interaction enables learners to express their ideas, hear their partners' ideas and give and

receive instant feedback through the use of positive gambits which increases the students' motivation and enhances attention and retention.

The reflective fieldnotes enabled the researcher to notice that the students with low level felt uncomfortable when were chosen to represent the group in the description of the completed task. Faced with this, the teacher combined individual and group grading, and in other cases, students were graded individually.

Table 9 Results of teacher's observation during students' pair and group work, week 7.

Rating scale: 2= always	1.5 = most of the time	1 = sometimes	0.5 = rarely
0= never			

0-110 (61					
Category	Always	Most of the time	Sometimes	Almost never	Never
Students use English to interact with their teammates		1,5			
Students use chunks and					
positive gambits during					
interaction	2				
Students interact and support					
their teammates with phrases					
thet encourses communication	2				
that encourage communication	Ζ				
Students focus on producing					
comprehensible texts, free of					
common syntax and					
pronunciation mistakes	2				
Students rehearse their oral					
presentation avoiding long					
pauses.	2				

Source: Observation descriptive fieldnotes, week 7 Author: Ana Loja



Figure 9: Results of teacher's observation, week 7 Source: Observation descriptive notes, week 7 Author: Ana Loja

By the end of the seven weeks of intervention, students were well acquainted with the procedures followed by the three Kagan Structures and with the expressions and chunks that should be used during group interaction in order to make speech more natural and especially in order to promote social interaction. The latter is extremely important since according to Carter (1999) as cited by Kagan (2014), peer interaction boosts brain work by giving students both visual and verbal stimuli and by giving them the opportunity to try to understand other people's minds. According to Carter, learning is more effective and the human brain becomes more active when learning involves interaction rather than when attempting to learn alone. Additionally, during week seven, students did not need to be reminded to use chunks; however, once in a while, some students turned to Spanish to interact with their teammates.

The information collected through observation clearly shows that students in the experimental group went through a process of familiarization with the three Kagan Structures and mainly with the process of peer interaction as a requisite to develop their

oral fluency. It took more than three sessions until students completely understood the dynamics of Talking Chips, Numbered Heads Together, and Timed Pair Share. In addition, it also took students some time to understand the function and pragmatic use of chunks and positive gambits. The three Kagan structures greatly facilitated the creation of an environment where students focused on the completion of a task through cooperative work and where interaction among group members was a requirement to successfully complete the group task. This environment facilitated the use of the English language for real communication, which confirms what Shumin (2002), Brown and Attardo (2005), and Wright (2010) claim are requisites to develop students' oral fluency.

It is worth mentioning that during the seven weeks of work with the three cooperative learning Kagan structures, students were exposed to comprehensible input in the form of questions, comments, opinions, phrases of encouragement, and formulaic expressions delivered by their teammates. Furthermore, students used English to negotiate meaning with their team members, and as students became more acquainted with the three Kagan structures and cooperative learning, they learned how to adjust their speech to the level of their teammates. An important characteristic of working with the Kagan structures is that groups were heterogeneous, and the tasks had certain level of difficulty that enabled students to work in their zone of proximal development. It is also important to note that during each session with the Kagan structures, students had abundant opportunities to hear the English language and use it. This is in accordance with what Kagan (1995) argues as the major advantages of cooperative learning. According to him, the work with Kagan structures allows students to receive comprehensible input, work in the zone of proximal development, to be exposed to

redundant communication, and to use the English language in a supportive and motivating context, and all these factors lead to the development of oral fluency.

The information collected by the researcher through observation was complemented by qualitative data collected through student journaling. The purpose of journaling was to collect information about the students' perceptions, feelings, and reflections about their performance and participation while working with the three Kagan Cooperative Learning Structures. These reflections allowed the researcher to obtain first-hand information about the effectiveness of *Talking Chips, Numbered Heads Together and Timed Pair Share* in the development of oral fluency as seen from the students' perspective. At the end of every activity involving one of the three Kagan structures, students were given a question to reflect on. After reading the students' entries, the most relevant information was grouped according to the questions that were used as prompts for students' reflection. Some of the information collected represents very important contributions to answer the research question of this study.

When students had to reflect on how team work helped them practice their speaking skills, most of the students' entries expressed positive feelings towards pair and group work (Talking Chips, Numbered Heads Together, and Pair Share). Eighteen students which represents 85.71% of the class indicated that teamwork helped them with the practice of their speaking skills. An extract of one of the students' reflection is self-explanatory: "*It helps me practicing by talking with others and producing ideas in English. It also helps me to make sure of the pronunciation of some words.*" Another student wrote the following: "*I think practice English in a team work is important because when we are in group we are more confident with us and in the group there is support to another person.*"

Students also mentioned how teamwork helped them lose the fear to speak English. They also pointed out the importance of listening to other people's points of view and underlined the importance of sharing information. These reflections describe aspects that Kagan (2009) argues are some of the greatest benefits of cooperative learning; mainly, it develops learners' self-esteem and communication skills, enhances their motivation and boosts their cognitive development.

Students also reflected on the degree of difficulty that the exclusive use of English during pair and group work represented to them. Nineteen students which represents 90% of the students indicated that it was not easy to use only English during pair and group work. The reasons given for this fact included the need for new words that were not part of their vocabulary. Other students mentioned the difficulty they had at the beginning and how they overcame it. All of the students mentioned the importance of using only English during group interaction since this helped them increase their vocabulary and improve their English. One of the students wrote the following, "*At first it was very difficult because I didn't practice my English, but this forced me to review and increase my vocabulary*." Another student expressed his feelings in the following way, "*It is not easy, but with the practice we can do it, and I felt worried because my participation in English is important for the grade of the* group."

This information corroborated what had been observed by the researcher. Students were very likely to speak in Spanish in the face of new vocabulary or when they felt that they were not able to express certain ideas in the target language. This confirms the role that context and the complexity of the topic play in fluency during real speech production as Fillmore (2000) and McCarthy (2009) state. Students also reflected about their contribution to the completion of their team task. All students claimed that they contributed to the completion of the team task by providing ideas and helping one another.

When students had to reflect about how they felt when their teammates corrected their mistakes and how useful this was to them, twenty students which represents 95 % claimed that it was useful to them when their teammates helped and corrected their mistakes. Students said this helped them remember vocabulary, pronunciation, and especially this improved their English. This is in line with what Roberts and Kreuz, (2015) identify as one of the benefits of peer correction and feedback. However, three of those twenty students said they felt embarrassed, uncomfortable, and nervous when they were corrected by their classmates. This contradicts what Roberts and Kreuz claim and supports what Brumfit (2000) suggests when he says that correction should be minimized during oral fluency practice. These students also understood that peer correction was intended to help them as it is shown by the following extracts, "At the start I felt a little embarrassed because I still have problems with vocabulary, but also I think it is important because I have had classmates with higher level of English, and that was very helpful to me." "This activity was good because our classmates corrected in a friendly way, and I felt more confidence when I spoke with them."

Another important reflection is the following: "When my teammates corrected my mistakes about vocabulary, I felt comfortable because after that I could remember this in other situations. In contrast to when I corrected them, I felt I may have a mistake." This reflection can be coupled with the one below, and it will be clear to see that some students felt insecure when correcting, and others felt that the correction could be wrong since it came from a classmate and not from the instructor. "I felt a few uncomfortable because I don't sure who had reason. I think that was complicated to take sentences with new words. However, in my opinion, it is necessary for learn *English.* "This information is supported by Kagan (1995) when he states that the only advantage that teacher fronted instruction has over cooperative learning Kagan structures is that teacher's output is more accurate than student output which gives learners more confidence on the language they have to imitate. The last two reflections are enlightening regarding the importance of managing peer correction during cooperative group work. Defining what mistakes can be corrected by peers can be a good way to avoid insecurity both in the student who corrects and in the student who receives the correction.

When students reflected on how they showed politeness and patience when listening to their teammates' participation, all students wrote that they were polite and patient, and the same was said about their teammates. They also indicated the importance of listening attentively to their classmates and of respecting equal participation. This adds evidence to one of the benefits of the three Kagan structures and cooperative learning, positive interdependence, as stated by Kagan and High (2002). Students also had to reflect about the use that they made of chunks and positive gambit to interact with their teammates. All students responded that they used the list of positive gambits and chunks in order to remind themselves about their use, and they also said that they used them at least once per session.

In brief, it is evident that the information collected through students' journals provided the researcher with important insights regarding the students' perceptions and feelings about their work with cooperative learning. According to them, their work with the three Kagan Cooperative Learning Structures helped them use English to interact with their partners and support one another in the production of speech. However, a few students felt insecure when providing their partners with examples of correct English or when giving target language support, and at the same time, they felt in doubt when they

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received corrective feedback from their teammates. This information provided more evidence to what had been observed by the researcher. Students needed time to become familiar with the dynamics of the Kagan structures, turned to Spanish when they felt that they did not know the words to express their ideas in English, found pair and group work very useful and enjoyable, and felt some anxiety when they had to present the group task and receive group grade.

The results of the student survey were contrasted with the information collected through teacher observation and through student journaling. This triangulation of information allowed the researcher to have more objective and solid information about the effectiveness of the three Kagan Cooperative Learning Structures in the development of university students' oral fluency.

The results are presented through tables and graphics. Each table presents a statement and the rating that the 21 students assigned to that statement.

Group work helps me feel relaxed when using English for communication			
Frequency	Number of students	Percentage	
Strongly agree	8	38%	
Agree	10	47.61%	
Somewhat agree	2	9.5%	
Disagree	1	4.76%	
Total	21	100%	

Table 10 Results of student survey, statement 1

Source: Student survey, statement 1 Author: Ana Loja



Figure 10: Results of student survey, statement 1 Source: Student survey, statement 1 Author: Ana Loja

The majority of students indicated that group work helped them feel relaxed when using English for communication (47% strongly agree and 38% agree). A low anxiety environment is what Slavin (2013) argues as a very important aspect to promote students' self-esteem and oral fluency development. However, 5% of the students partially agreed with the statement which corroborates what students had expressed through journaling. This shows that group work may involve students in states of uncertainty especially when they are not sure about the proper or correct use of certain forms and use of the language. In addition, the fact that students worked in groups for a task completion which was usually graded either individually or in groups represented some degree of stress and uncertainty to the student as they expressed it in their journals.

Table 11 Results of student survey, statement 2

All group members have equal opportunities to use English to speak			
Frequency	Number of students	Percentage	
Strongly agree	9	42.85%	
Agree	11	52.38%	
Somewhat agree	0	0%	
Partially agree	1	4.76%	
Disagree	0	0%	
Total	21	100%	

Source: Student survey, statement 2 Author: Ana Loja



Figure 11: Results of student survey, statement 2 Source: Student survey, statement 2 Author: Ana Loja

Fifty two percent of the students strongly agreed and 43% agreed with the fact that cooperative group work gave students equal opportunities to speak English. This information confirms what was observed by the researcher during students' pair and group work. In addition, through journaling students expressed the opportunities that the Kagan Structures, especially "Talking Chips" gave them to use English to speak in class which in turn adds evidence to what Kagan (2009) states as one of the benefits of using Kagan structures.

I prefer group grading to individual grading				
Frequency	Number of students	Percentage		
Strongly agree	6	28.57%		
Agree	7	33.33%		
Somewhat agree	4	19%		
Partially agree	4	19%		
Disagree				
Total	21	100%		

 Table 12 Results of student survey, statement 3

Source: Student survey, statement 3 Author: Ana Loja



Figure 12: Results of student survey, statement 3 Source: Student survey, statement 3 Author: Ana Loja

The pie chart clearly shows that students had different opinions regarding group grading and individual grading when working with the Kagan Structures. This was also reflected through journaling where one student indicated to feel worried when thinking about group grading and the possibility that any of the team members would represent the group in the final task presentation. This information shows the importance of combining individual and group grading while working with the Kagan Cooperative Learning Structures. According to Kagan (2009), group grading should be avoided since it can be the source of stress and frustration among high achievers and low achievers alike. However, this author recommends random selection to have students present a task orally. The benefits of random selection are supported by a research study conducted by Keen (2006) who worked with high school students, and random selection helped students stay focused on the task and become accountable for their work. This technique was used by the researcher during pair and group work in order to assess students' work and practice with the target language.

All group members practice principles of mutual respect and tolerance during				
interaction				
Frequency	Number of students	Percentage		
Strongly agree	13	61.90%		
Agree	8	38.09%		
Somewhat agree	0	0%		
Partially agree	0	0%		
Disagree	0	0		
Total	21	100%		

Source: Student survey, statement 4 Author: Ana Loja



Figure 13: Results of student survey, statement 4 Source: Student survey, statement 4 Author: Ana Loja

All students participating in the study agreed on the fact that group interaction was characterized by an environment that favored respect and tolerance. This information is supported by what students expressed through their journal reflections. Students felt supported by their teammates during teamwork, and their ideas were listened. This affirmative response given by students can also be explained as a positive effect of the introduction of positive gambits for social interaction. Students learned the importance of establishing rapport with their partners through phrases as "You have made a good point." "Your ideas are very interesting," and other phases and expressions that students received and were modeled for them by the teacher at the beginning of the study. This adds evidence to the benefits of the three Kagan structures, object of this study, and claimed by Kagan et al., (2016).

Group work activities are interesting and keep me motivated.			
Frequency	Number of students	Percentage	
Strongly agree	15	71.42%	
Agree	6	28.57%	
Somewhat agree	0	0%	
Partially agree	0	0%	
Disagree	0	0%	
Total	21	100%	

 Table 14 Results of student survey, statement 5

Source: Student survey, statement 5 Author: Ana Loja



Figure 13: Results of student survey, statement 5 Source: Student survey, statement 5 Author: Ana Loja

All of the students participating in the study expressed their agreement regarding the motivation and interest that group work represented to them during the study. This result shows that the Kagan Structures engaged students in an active and meaningful use of the language. Students interacted with their peers, and English was the medium for such an interaction, confirming what Kagan (2009) states as the main advantages of Kagan structures. In addition, this interaction promoted the use of English among the group members where everyone had equal opportunities to express their ideas and make contributions in a context where respect and tolerance where prioritized.

On the seventh week of intervention, a post-test was administered to both the control and experimental groups. This post-test had a similar structure as the pre-test, and the same rubric used with the pre-test was used with the post-test. The only difference with the pre-test was the list of topics that were chosen for the interview. These topics are presented in the annexes section, and they were not new to the students since they worked with them during pair work and group work with the three Kagan Structures.

The tables and graphics below show the scoring of the different aspects that form part of oral fluency considered from a holistic perspective. It is important to mention that the first three, according to McCarthy (2006), refer to the traditional aspects assigned to oral fluency which are automaticity, correct grammar use and pronunciation, and speed of delivery. However, following McCarthy's holistic approach to oral fluency, and Fillmore's (2000) emphasis on the use of formulaic expressions to enhance conversational flow, the use of formulaic chunks during oral production was assessed as part of fluency. Finally, the interaction between the interlocutors is another element that Brown and Attardo (2005), McCarthy (2009), Kagan (2014), and Wright
(2010) consider an integral part of oral fluency and was integrated to the rubric designed for the assessment of the students' fluency in oral production.

In order to have a thorough understanding of the results of the post-test, it is important to mention that both the experimental group and the control group worked with the same course content, number of class hours, and received a list of chunks and positive gambits, and both worked with a power point document with common mistakes that should be avoided. The only difference between the two groups was the use of Timed Pair Share, Numbered Heads Together, and Talking Chips as instructional strategies to help students in the experimental group develop their oral fluency. The control group students worked with traditional pair work and group work and individual activities as presentations.

Catego	Student Speech is		Pauses are short		Student uses		Student uses			
ry	commu	nicates	comprehensible				chunks and		positive	
·	easily w	vith	with acc	curate			formulaic		gambits during	
	interloc	utor	pronunc	iation			expressi	ons that	interact	ion
			and synt	tax			promote	fluency		
	Numb	Percent	Numbe	Percent	Numbe	Percent	Numbe	Percent	Numb	Percent
	er of	age	r of	age	r of	age	r of	age	er of	age
	studen		student		student		student		studen	
	ts		S		S		S		ts	
	7	33.33	6	28.57	12	57.14	11	52.38%	5	23.80
Excelle		%		%		%				%
nt										
X 7		17 (1		57 14		22.22				c1 00
Very	10	4/.61	10	57.14	7	33.33	7	22.220/	10	61.90
good	10	%	12	%	/	%	/	33.33%	13	%
		1/ 28		14.28						14.28
Good	3	14.20	3	14.20	2	0 52%	3	1/ 28%	3	14.20
0000	5	70	3	70	2	9.3270	5	14.2070	3	70
Poor	1	4.76%								
No										
product										
ion										

Table 15 Results of students' post-test, experimental group

Total										
	21	100	21	100%	21	100%	21	100%	21	100%

Students' average grade: 8.09/10

Source: Students' post test Author: Ana Loja



Figure 15: Results of students' post-test, experimental group Source: students' post-test, experimental group Author: Ana Loja

An analysis of the results of the post-test of the students in the experimental group show a marked difference with their pre-test. By looking at the graphics, it might be interpreted that the oral fluency of the students in the experimental group did not have almost any progress in the three first aspects outlined in the rubric which are related to the temporal and accuracy aspects of fluency. However, the explanation resides in the degree of difficulty of the topics used for the interview in the post-test.

Those topics demanded from the students the use of new and specific vocabulary and the use of high level thinking skills, while the questions in the pre-test required from the students to talk about very familiar topics that had been asked since the beginning of their experience as English language learners. Taking this fact into consideration, it can be said that students in the experimental group improved their oral fluency during the seven weeks of intervention. Another aspect that deserves attention is the incorporation of chunks and positive gambits into the students' repertoire. This was the result of the constant interaction that students were exposed to through the work with the three Kagan Structures. As a consequence, the language produced by the experimental group students sounded more natural and spontaneous showing an improvement in the development of their oral fluency. These results add evidence to the benefits of the use of the Kagan structures in oral fluency development stated by Kagan (1995).

Catego ry	Student commu easily w interloc	nicates vith utor	Speech is comprehensible with accurate pronunciation and syntax		Pauses are short		Student uses chunks and formulaic expressions that promote fluency		Student uses positive gambits during interaction	
	Numb er of studen ts	Percent age	Numbe r of student s	Percent age	Numbe r of student s	Percent age	Numbe r of student s	Percent age	Numb er of studen ts	Percent age
Excelle nt	7	33.33 %	6	28.57 %	11	52.38 %	3	14.28%		
Very good	5	23.80 %	10	47.61 %	5	23.80 %	6	28.57%	9	42.85 %
Good	8	38%	4	19%	4	19%	11	52.38	11	52.38
Poor	1	4.76%	1	4.76%	1	4.76%	1	4.76%	1	4.76%

Table 16 Results of students' post-test, control group

No										
product										
ion										
Total										
	21	100	21	100%	21	100%	21	100%	21	100%

Average grade: 7/10 Source: Students' post-test, control group Author: Ana Loja



Figure 16: Results of students' post-test, control group Source: Students' post-test control group Author: Ana Loja

As far as the control group is concerned, their oral fluency had a similar development as the experimental group in the three first categories corresponding to easiness to communicate with the interlocutor, accuracy of pronunciation and syntax, and the use of short pauses. However, there is an important difference in the fourth and fifth categories of the components of oral fluency. Their use of formulaic expressions during the interaction with the interlocutor was less effective than the experimental group. In the same way, the use of positive gambits for social interaction ranged from good to poor. This difference might be explained by the lack of practice of these elements within a context that promoted real interaction.

Finally, the average grades obtained by the two groups can summarize the above explanation. The experimental group obtained 8.09/10 while the control group obtained 7/10. There is a difference of 1.09 points between the two grades. However, this difference can be more noticeable when listening to the students' oral production. The experimental group speech sounded more natural and spontaneous, and it also sounded as produced by a speaker who felt confident with the target language.

CONCLUSIONS:

The results of the data collected and their corresponding analysis lead the researcher to present the following conclusions.

First, the Kagan Cooperative Learning Structures Timed Pair Share, Numbered Heads Together, and Talking Chips are very effective when used to help English language learners to develop their oral fluency. They provide the learners with abundant comprehensible input, rehearsal with the use of the language, and equal opportunities to use the language in a meaningful way.

Second, the three Kagan structures provide learners with the proper environment to promote group interaction which in turn results in the development of learners' social skills. Interaction also helps learners to produce contextualized speech and make a functional and pragmatic use of the English language. All of this enhances the learners' self-esteem, cognitive development, and communication skills.

Third, the use of the Kagan structures brings about students' very positive perceptions about the use of cooperative learning to practice and develop their fluency in oral production. Students feel that group interaction motivates them to use the language to speak; they value the support and encouragement that their teammates provide them, and they acknowledge the equal opportunity that all group members have during cooperative group work.

Fourth, cooperative learning might cause some stress among students when group grading is used and when students need to rely on peer feedback when using new language.

Fifth, the use of formulaic expressions, chunks, and positive gambits contributes to an increase in the automaticity of speech production during interaction and helps learners produce speech that sounds more natural.

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Sixth, it takes some class sessions before students become familiarized with the dynamics of the work with Timed Pair Share, Numbered Heads Together, and Talking Chips. Teacher modeling plays a very important role in helping students work with the three Kagan structures, object of this study.

Seventh, the use of English during group interaction is challenging for students and takes some time until students become used to speaking the target language to communicate with their group members. Students turn to Spanish when they need vocabulary that is not part of their repertoire or when they feel that they cannot convey their ideas thoroughly.

RECOMMENDATIONS:

Based on the conclusions of this research study, the following recommendations are presented to those teachers and instructors interested in helping English learners become fluent speakers of the English language.

First, Timed Pair Share, Numbered Heads Together, and Talking Chips should become part of the teaching strategies employed by English instructors to develop their learners' oral fluency.

Second, Kagan Cooperative Learning should be incorporated into the English class in order to provide learners with opportunities to use and practice the target language through meaningful interaction and especially to give learners the opportunity to develop their social skills.

Third, English teachers should make use of lists of formulaic expressions and positive gambits in order to help their learners gain automaticity in their English language production and to make a functional use of the language.

Fourth, teacher should model the use of the Kagan structures until students have a thorough understanding on how to work with them.

Fifth, when teachers work with cooperative learning, they should combine group grading with individual grading in order to avoid students' anxiety and stress.

Sixth, teachers should form heterogeneous groups since this kind of grouping benefits high achievers and low achievers.

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1. Questions for pre-test and post-test

Pre-test:

- What is your major and why did you choose it?
- Why are you taking this English course?
- What are some of the advantages of learning English?
- What do you do to practice English?
- What English language skills (listening, speaking, reading, and writing) present the most challenge to you?

Post-test: (topics derived from material studied in class)

- What are the benefits of space exploration?
- How do you define success and which are the most important factors that lead people to succeed?
- What are some possible solutions to food shortage?
- What are your opinions about the material's economy?
- What are the similarities and differences between human and animal community, and what can you learn from them?
- 2. Analytical rubric for assessing students' oral fluency through pretest and post-

test

Rating scale: 2= excellent 1.:	5= very good	1 = good	0.5=	poor
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0= no production

Rubric for evaluating students' oral fluency

	1
Student communicates easily with his interlocutor.	
The speech produced is comprehensible with accurate pronunciation	
and cuntary	
and syntax.	
Pauses are not too long to hinder understanding	
r duses die not too long to inneer understanding.	
Student uses chunks and formulaic expressions that promote fluency.	
Student uses positive compile while interacting with his interlegator	
Student uses positive gamons while interacting with his interiocutor.	
TOTAL/10	

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3. Questions for guiding students during journal reflection

- How did team work help me with the practice of my English speaking skills?
- Was it easy or difficult to use only English to interact with my classmates during group work?
- How did I contribute to the completion of the team task?
- How did I feel when my teammates corrected my mistakes? Did it help me?
- How did I show politeness and patience when listening to my teammates' participation?
- How many times did I make use of chunks and positive gambits to interact with my teammates?

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4. Observation sheet for assessing students' development of their oral fluency

Category	Always	Most of the time	Sometimes	Rarely	Never
Students use English to interact with their teammates.					
Students use chunks and positive gambits during interaction.					
Students interact and support their teammates with phrases that encourage communication.					
Students focus on producing comprehensible texts, free of common syntax and pronunciation mistakes.					
Students rehearse their oral presentation avoiding long pauses.					
Reflective fieldnotes:					

during pair work and group work.

Author: Ana Loja

5. Questionnaire about students' perceptions on the use of cooperative learning in

the development of oral fluency.

Dear student, the following questionnaire intends to know your perceptions regarding the usefulness of cooperative learning in the development of your speaking skills, specifically oral fluency.

Instruction: Read each one of the statements and mark the option that best describes your opinion.

	Strongly	Agree	Somewhat	Partially	Disagree
	agree		agree	agree	
Group work helps me feel					

relaxed when using			
English to communicate.			
All group members have			
An group members have			
equal opportunities to use			
English to speak.			
I prefer group grading to			
I prefer group grading to			
individual grading.			
All group members			
practice principles of			
practice principles of			
mutual respect and			
tolerance during			
interaction			
interaction.			
Group work activities are			
interesting and keep me			
motivated			
mouvateu.			

Author: Ana Loja

6	Chunks and	nositive	gambits for	students'	use during	nair and	groun	work
υ.	Chunks and	positive	gampits for	Students	use uur mg	pan anu	group	WUIK

Speaking Skill	Chunks
Offering advice and suggestions	I suggest +verb-ing
	How about + verb-ing
	I'd recommend+ verb-ing
	One idea is to + verb
	It might be a good idea to + verb-ing
Encouraging communication	I didn't hear what you said about

	Can you say that again?
	Could you repeat that?
	Could you explain that a bit more?
	What do you mean by that?
	Have you ever?
Shifting the topic	By the way
	Speaking of which
	That reminds me
Asking for clarification	I didn't follow what you said about
	I'm sorry, I'm not sure I understand
	Could you go over that point again, please?
	Can you repeat that please?
	Would you explain that again?
Agreeing and disagreeing	I agree.
	I like that idea.
	You have a point.
	That's what I think.
	That's a great idea.
	I'm sorry, but I disagree.
	That's not always true.
	I'm not sure about that.
Positive gambits to develop social	I enjoyed listening to you because
skills	Thank you for sharing
	What I learned from you is
	(student's name) do you agree?

	That's interesting(person's name)
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Source: Bohlke & Brinks (2014, p. 3). Kagan (2014, p. 3.36)

Dates, Kagan structures, and topics used during the intervention process, from May 15th to June 28th

May 15th: Teacher explains the details of the research project and the role of the control and experimental groups. Students receive the informed consent forms for their reading and signing. The control group was formed by 21 students, and the experimental group was also formed by 21 students.

May 16th: Students receive a list of chunks and positive gambits to promote social skills. Teacher models their use and explains that during the course students will make an active use of them during pair work and group work.

May 17th: First team work activity: Numbered Heads Together: Teacher explains the purpose and steps of the activity. Then teacher groups students randomly forming heterogeneous groups. Students are given a topic "Food Shortage" for brainstorming. Students in each group have to contribute with eight important ideas or aspects related to food shortage in the world. Students have 15 minutes for brainstorming and completing the mind map below. Teacher chooses one student to represent the group and describe the mind map orally. The presentation includes only main ideas, and students should use correct pronunciation and structure when presenting the mind map. Students have previously practiced some pronunciation rules and have received a list of useful chunks for group interaction as well as positive gambits to develop students' social skills.



There are five groups of four students each. Teacher observes the students' group work and completes an observation sheet. Each group receives a score based on their use of the English language during the execution of the activity.

Reflective fieldnotes were taken with valuable information regarding the development of group work, and students' oral fluency was graded based on group scoring.

Group grading: Students' grade was based on the group presentation and one answer to a question.

May 19th: Second group activity. Timed Pair Share: Students take turns to talk about how people can be nourished emotionally.

May 22ndth: Third group activity: Talking chips: Description of the use of food across cultures to symbolize different cultural aspects.

May 24th: Fourth group activity: Numbered Heads Together. Students work in groups of four and have to complete the following task. Listen to a lecture, use note-taking of the main ideas, listen to the lecture a second time and focus on details. Use their notes to form a summary of the lecture and present it orally to the whole class. Students are graded based on the quality of the summary, pronunciation, syntax. Teacher observes the rehearsal of the presentation and grades the group work.

May 29^{th:} Fifth group activity: Numbered Heads Together. Students analyze different strategies presented by the article "How to Feed Nine Billion People" and choose the best one.

June 2nd: Seventh group activity: Think Pair Share. Analyzing similarities and differences between animal community and human communities

June 5th: Eighth group activity: Numbered Heads Together. Discussion on advantages and disadvantages of English Town

June 6th: Ninth group activity: Talking chips. Giving personal opinions on environmental issues. Students take turns to express their opinions regarding 14 different aspects of environmental issues.

June 8th: Tenth group activity: Talking chips. Students take turns answering and supporting the answer to the question *Are we alone in the universe*?

June 12th: Eleventh group activity: Numbered Heads Together. Students are asked the question Is it worth spending millions of dollars on space exploration considering that there are problems on Earth that need urgent solutions?

June 14th: Twelfth group activity: Numbered Heads Together. Students listen to a lecture on orbital debris and present an oral summary.

June 19th. Thirteenth group activity: Think pair share: advantages and disadvantages of two types of work space: closed and open

June 22nd. Fourteenth group activity: Talking chips. Are Gen Y-ers super consumers?

June 26th. Fifteenth group activity: Numbered Heads Together. What's the best strategy to reduce the environmental impact of the linear system of production?

June 28th. Sixteenth group activity: Talking chips. Students give opinions on the qualities they consider are the most important factors in success (vision, persistence, creativity, passion)

8. Formulario de consentimiento informado

FORMULARIO DE CONSENTIMIENTO INFORMADO

Título de la investigación: The Effectiveness of the use of Kagan Cooperative Learning Structures "Timed Pair Share, Numbered Heads Together, and Talking Chips" in the development of EFL university students' oral fluency

Organización del investigador: Universidad Particular de Loja (Universidad de

Cuenca)

Nombre del investigador: Ana Beatriz Loja Criollo

Datos de contacto del investigador: <u>ana.loja@ucuenca.edu.ec</u> -

<u>abloja@utpl.edu.ec</u>

Director de la Investigación: Nina Nesterenko

Introducción: Estimado estudiante, el presente documento tiene el propósito de solicitar su participación en el estudio denominado "La Efectividad del uso de las Estructuras Kagan de Aprendizaje Cooperativo Timed Pair Share, Numbered Heads Together, and Talking Chips" en el desarrollo de la fluidez oral en estudiantes universitarios que toman clases de inglés como lengua extranjera". Su participación es totalmente voluntaria. En caso de que decida participar y luego decida no continuar, usted tiene la libertad para hacerlo. Esta decisión será respetada y no le causará ningún problema.

Propósito del estudio: El propósito es estudiar la efectividad que puede tener la utilización de tres técnicas "Timed Pair Share," "Numbered Heads Together," and Talking Chips" en el desarrollo de la fluidez oral.

Procedimiento que se seguirá en el estudio: Usted participará en una entrevista al inicio del curso así como al final de éste. Esta entrevista tiene como objeto medir su fluidez oral al iniciar el curso y al finalizarlo. Ambas entrevistas tendrán cinco preguntas abiertas. Las entrevistas serán grabadas con el único propósito de tenerlas como referencia dentro del estudio. En ningún momento se utilizará su nombre dentro del estudio. Además, usted llevará un diario en donde registrará sus reflexiones sobre la efectividad de las actividades utilizadas en clase y contestará una encuesta de opinión sobre el trabajo cooperativo.

Riesgos y beneficios: Su participación en este estudio no presenta ningún riesgo a más de la posible incomodidad que implica participar en una entrevista con su profesor y con un profesor desconocido.

Su participación en la entrevista puede ayudarlo a conocerse mejor y a reflexionar sobre su aprendizaje.

Duración de la entrevista: La entrevista tomará entre cinco y diez minutos.

Confidencialidad de los datos: Su participación es confidencial y su identidad será totalmente protegida. Su entrevista será codificada con un número. En caso de que se tomen partes de la entrevista en la redacción de una presentación o publicación, se utilizará seudónimos para proteger su identidad.

Derecho a hacer preguntas: Usted tiene todo el derecho a hacer preguntas sobre su participación en esta investigación.

Firma de la persona que da el consentimiento informado:

Tengo información clara sobre mi participación en este estudio. Estoy consciente de los riesgos y beneficios. Tuve suficiente tiempo para leer la información en este documento y pensar sobre mi participación. Se me ha entregado una copia de este formulario de consentimiento informado. Con mi firma, indico el deseo de participar voluntariamente en esta investigación.

Nombre del participante: _	
Firma del participante:	

Nombre del investigador: Ana Loja C.

Fecha: _____