Universidad Casa Grande

Dialogues to Promote Speaking in Students of the School of Network and

Telecommunications

Xavier Oswaldo Viteri Guevara

Guide: María Rossana Ramírez Ávila

Abstract

This innovation was implemented to improve students speaking production. Students'

participation evidenced lack of vocabulary, and mispronunciation in oral activities. To

help students overcome those challenges, pair work through recorded dialogues in

technical context was implemented. Participants studied at a public university located in

Guayaquil. They belonged to the school of Net and Telecommunications. An action

research was conducted. It included quantitative instruments: pre and posttests, pre and

post-surveys. Data collected answered four research questions, three related to

improvement in speaking in terms of vocabulary, fluency, and accuracy, and a last to

know students' perspectives to the components of this innovation. Results showed a

large impact (Cohen's d=2.97 – average of the three speaking components) for speaking

due to the innovation (p=.000). Students' perspectives also changed after the

implementation. The average for limitations of speaking was reduced. The means of the

post-survey were positive for the components of the innovation (pair work, planning

and structuring, and recording of the dialogues). Implications of this study suggest other

higher education authorities and EFL teachers to engage students in the lessons with

authentic and student-centered activities.

Keywords: technical vocabulary, pair work, dialogues, speaking

Resumen

Esta innovación se implementó para mejorar la producción oral de los estudiantes. Se observó falta de vocabulario, errores en pronunciación y muy poca participación en actividades orales. Para ayudar a los estudiantes de la escuela de Redes y Telecomunicaciones de una universidad pública de Guayaquil a mejorar en esos aspectos, se incluyó trabajo en parejas a través de la grabación de diálogos en un contexto que aplicaba vocabulario técnico. La investigación-acción incluyó instrumentos cuantitativos: pruebas iniciales y posteriores, encuestas de inicio y al término de la innovación. Los resultados mostraron un gran impacto para la producción oral (Cohen's d=2,97, promedio de los componentes de las preguntas uno, dos y tres) y son estadísticamente significativos (p=.000). Las perspectivas de los alumnos también cambiaron luego de la innovación. Se redujo el promedio con relación a las limitaciones de la producción oral. Las medias de los resultados de las encuestas finales fueron positivas para los componentes de la innovación (trabajo en pareja, planificación y estructuración del diálogo y su grabación). Las implicaciones de este estudio están dirigidas a las autoridades y docentes de inglés como lengua extranjera de otras instituciones de nivel superior, quienes deseen motivar a los estudiantes con lecciones que contengan actividades auténticas y centradas en los alumnos.

Palabras clave: vocabulario técnico, trabajo en parejas, diálogos, destreza oral

Dialogues to Promote Speaking in Students of the School of Network and

Telecommunications

Due to the importance of learning English, South American countries, Ecuador

not being the exception, have included it in the curriculum (British Council, 2015;

Ministerio de Educación de Colombia, 2018; Ministerio de Educación de Chile, 2012;

Ministerio de Educación de Ecuador, 2016). It is essential to learn English today. The

British Council (2015) highlighted that there is a strong correlation between this foreign

language and better income. Additionally, this institution reported that employees

"would learn English to improve their employment prospects" (p. 7). Barnawi (2011)

mentioned that English is dominant in science, technology, and business.

Ecuadorian policies require university students to meet a B1 level prior to their

graduation (Consejo de Educación Superior, 2013). However, participants of this study

held an A1 level, according to a proficiency test taken online. They were students of the

Networking and Telecommunications school. Before they finish the third level, they

need certifications from technological areas like CNN1 Cisco and IBM. Most

certifications require spoken communication in English given the personalized teaching

of electronic circuits that come from North America. Therefore, reaching standard

levels of oral fluency for communication is essential for these language learners.

Roeders (1997) mentioned that in order to improve education, active learning

techniques should be applied. They encourage creativity and active participation of

students. They are sometimes included in lesson plans to train autonomous and critical

human beings. This study proposes active learning through the use of dialogues in an EFL

class. In a Proquest search, there were 14,443 studies that have used dialogues to improve

fluency. There were only four studies conducted as result of including the word

telecommunications (Barnawi, 2011; Mestre, 2011; Tan, 2009; Valeo, 2010). Two of

them were conducted at a higher education institution (Barnawi, 2011; Mestre, 2011). It is important to notice that these are all dissertations and do not belong to recent years. Therefore, there is a gap in the literature of the use of dialogues in an EFL class for higher education students in the school of Networking and Telecommunications.

Studies report that students have many reasons for not developing speaking skills (Al-Eiadeh, Al.Sobh, Al-Zoubi, & Al-Khasawneh, 2016; Derakhshan, Khalili, & Beheshti, 2016). Some of those are: confusion, embarrassment, deficiencies of English learning in prior educational levels, difficulties in pronunciation, limited vocabulary, fossilization, lack of confidence, anxiety due to inaccurate utterances, and misunderstanding questions, among others. These conditions worsen when teachers want to develop speaking skills in a non-English speaking country, like Iran (Rashtchi & Khoshnevisan, 2008); and as the case of this study, in Ecuador. These authors also made a review of three studies that were conducted to improve speaking through changes in the syllabus, adding teaching principles, and assessment (Al-Eiadeh, et al., 2016; Derakhshan, et al., 2016).

In this regard, Derakhshan, et al. (2016) pointed out the usefulness of practice, structure, and planning to develop speaking skills. Moreover, Hamer (2007) suggested to combine language features in communication. Rashtchi and Khoshnevisan (2008) added to also know how native speakers manage the language in context. The Council of Europe (2018) also considers conversation as a macro-functional basis of the Common European Framework of References. It is within the interaction component that shows transactional language use for information exchanges to obtain goods and services. Therefore, oral practice is better in dialogues to promote communication. If the practice is authentic or simulate real situations, students become engaged.

Currently, the use of technology in education is considered motivating to students.

In this regard, the national plan of studies, in the TICs and telecommunications area, seeks to enhance the performance of digitized processes in education. "The digitalization of processes allows the public sectors achieve a greater degree of efficiency, expand its coverage and improve their communication systems, encourage the development of knowledge." (Ministerio de Telecomunicaciones y de la Sociedad de la Información, 2016, p.38). Therefore, this study involved the use of mobile devices as a resource for students to record their dialogues.

The ministry of education has set standards for students taken from the Common European Framework as reference. Thus, this study included the ones from the spoken production which served for two objectives: students to start conversations, and the pair to understand an interlocutor. The standard describes that students "can understand everyday expressions aimed at the satisfaction of simple needs" (Council of Europe, 2018, p. 84). During the practices, dialogues included a variety of contexts from daily routine to work-simulated conversations.

All in all, the effect of dialogues was tested to improve oral skills in the faculty of Telecommunications at an important public university in Guayaquil. Due to students' low oral participation, it was expected that students gain more confidence by working in pairs and recording their conversations on a mobile application. Next section introduces the literature review that supported this innovation.

Literature Review

This section is a review of theories and similar research that has been conducted to explore the efficiency of dialogues to improve oral skills. Besides, the pedagogical practices included the Communicative Language Teaching approach, so there is some description of this approach and the principles that were applied in the innovation.

This innovation was based on the principles of Communicative Language Teaching. Jacobs and Farrell (2003) made a list of this approach components and remarked the following:

- Focusing on the role of the learner as a key component in the process.

- Teaching is based on process rather than product.

- Connecting the school to the context of the world.

- Considering individual differences of learners and the importance of social nature of learning.

- Emphasizing in meaning and lifelong process.

Pair work through real-life and field-related dialogues matches well the before mentioned components. Students were active at writing their dialogues, and then recording in pairs. They applied content related to their field of studies to connect school practices with the world. Then, students uploaded their recordings in a Whatsapp group created for the purpose of this study. This is a common activity nowadays. If they do not write, they record their voices in applications available in their mobile phones.

However, Oprandy (as cited in Jacobs & Farrel, 2003) highlighted the critical role of teachers in the design of pair work activities. When they plan pair work, they should include meaningful tasks. Moreover, teachers have to tolerate messiness because of the organization of the tasks while identifying students' needs to meet them accordingly.

Authors coincide that pair work enhances learner's autonomy (Harris & Noyau; Macaro, as cited in Jacobs & Farrel, 2003). They explain that the collaboration among peers raises independence from the teacher, as it happened in other approaches. They also highlight the role of meaningful tasks to retain more information. In this regard, it is important to consider student's preferences of topics.

Speaking

This skill does not only aimed at understanding the linguistic features, but it also involves interpreting and knowing the meaning of the message. To this end, important components are vocabulary and grammar (Derakhshan, Tahery, & Mirarab, 2015). Lucas (2001) listed other decisions that appear during this process: being knowledgeable of the topic, organizing thoughts into spoken ideas, structuring the message, and responding to the listeners' feedback. For Backlund (as cited in Al-Eiadeh, et al., 2016), the same issues are classified into social, self, and content knowledge. The author added that communication may be impaired if students show deficiencies in one of them.

Speaking involves fluency and accuracy. The first refers to the ability to speak spontaneously and without many pauses. The later to construct grammatically correct ideas, phrases, or chunks (Derakhshan, Tahery, & Mirarab, 2015). For other authors like Bygate, speaking also involves interaction and production. Bygate defined production as the ability to speak without time limitations; and, interaction is produced when pairs negotiate the conversation (as cited in Derakhshan, Tahery, & Mirarab, 2015). Burns and Joyce (as cited in Al-Eiadeh, et al, 2016) shared similar points of view. They considered speaking involves interaction to construct meaning. This interaction means not only receiving and processing information but also producing it.

Hence, students require extended, authentic, and meaningful practice (Celce-Murcia, 2001; Jacobs & Farrel, 2003). Celce-Murcia (2001) added that speaking tasks need structure and planning. This author suggested to use short dialogues, and a structure of question-answers to start with. However, students' proficiency level required that the structure and planning were preceded by vocabulary introduction.

Technical Vocabulary

Participants in this study belonged to the school of Network and Telecommunications. Thus, technical vocabulary from their field of study were introduced in readings. Mahraj (2018) and Wanpen, Sonkoontod, and Nonkukhetkhong (2013) sustained that learning technical vocabulary is an important factor to students of technical areas of study. Students like to be familiar with the type of English used in their career (Mahraj, 2018). They also need to communicate effectively and convey meaning of that communication in their fields (Wanpen et al., 2013). Mahraj (2018) classified vocabulary into two main categories. The first refers to the ones found in academic texts. The second, to the lexicon that is associated with specific areas of study.

To the previous classification, Wanpen et al. (2013) added that sometimes the meaning of words vary or they can be unique if they are used in specific areas. For Mahraj, vocabulary raises students' proficiency in the four skills of the language. The study of this author promoted grammar rules to raise students' knowledge of technical vocabulary.

Dialogues

There are not many studies that have explored dialogues to improve speaking. To improve speaking, there are many research studies in the context of EFL that have investigated teacher's and students' perspectives of role plays (Krebt, 2017; Tran, 2016); the use of improvisation techniques for transactional and interpersonal conversation (Hadeli, 2017); self-recording videos (Rojas & Arteaga, 2019); and, audiotaped dialogue journal (Rashtchi & Khoshnevisan, 2008). In the last study, students interacted with the teacher talking about a variety of topics. The purpose of the teacher, as in a regular dialogue, was to be an active interlocutor who responded to students' written work. Ho (as cited in 2008) reported that dialogue journals are excellent resource of input to ease appropriate output.

This study proposed dialogues after a topic has been introduced. When recording the dialogues, students may demonstrate difficulties like one of the pair trying to dominate the conversation, speaking very low and not clearly, ignoring the pair, or making constant interruptions (Backlund as cited in Al-Eiadeh, et al., 2016).

Having identified students' poor oral participation in classes due to several reasons, this study implemented the use of dialogues where students had to plan and organize their ideas before interacting. After this literature review, this study explored the following research questions:

1. To what extent does pair work through dialogues improve spoken fluency?

2. To what extent will dialogues improve vocabulary?

3. To what extent will dialogues improve students' accuracy?

4. Do student's perspectives change after the innovation?

Innovation

The purpose of this study was to improve students' speaking skills through the use of dialogues. The innovation started in August for a period of six weeks. Classes were held on Tuesday, Wednesday, and Friday for two hours each day. The content was taken from the regular coursebook and from adapted material related to Net and Telecommunication which is students' field of study.

As suggested by authors in the literature review, students planned and structured their dialogues before practicing them. The planning was in pairs. They had to read and write a dialogue that reflected their understanding of the passages. This practice was done after introducing the topics and conducted the activities of the book. To raise students' confidence and lower their anxiety levels, they practiced their lines before they recorded their conversations. The teacher monitored the process and provided feedback if needed.

Students could use other aids like pronunciation applications from google to help them improve their utterances. Those aids were provided by the teacher or students could search the ones of their preferences. Students typed in the search engine (google) the sentence, question, phrase, or word and listened to them as many times as they felt necessary.

After each practice, students used a rubric to peer assess their work. This was introduced by the teacher. It was used with an example of a recording. Students assessed their work to improve it in the next delivery. This process was recycled every other class. By the end of the innovation, students produced five recordings. From them, the first and last were considered to evidence or not improvement as result of the innovation.

Methodology

This was an action research. It is described by Ravid (2015) as a cycle that starts with the identification of problems that need to be improved, search for research-based practices, implement them, and report the results. This action research included quantitative instruments to answer the research questions. Data were collected at the beginning, during, and at the end of the innovation for a period of six weeks.

Participants

Forty students from two different groups participated in this study. They belonged to the career of engineering and networks. Their English proficiency is A1-A2, according to a test taken online. Their ages ranged from 18 - 40 years. The average age was 20. They were in the third semester of the school of Mathematics and Physics at a public university in Guayaquil. These two groups were assigned to the teacher-researcher. They had similar limitations in speaking, that was the reason to implement the study in both classes. They came from nearby cities like Babahoyo,

Milagro, and Yaguachi.

Results of a preliminary survey indicated that students practiced English outside classes for about two hours. Twenty two students said they spoke English to relatives or friends. The ones that did not practice mentioned as the main reason the lack of money to do so. Sixteen students reported to use technology to learn English. Interestingly, students that did not use technology explained that it was dangerous (13), they also said they lack resources (10), and there was one student that indicated he did not have the necessity to practice English outside classes. Most students (30) agreed that teachers should use technology in the classroom. They considered technology makes learning interesting and entertaining.

Instruments

To answer the research questions, the following instruments were applied:

Pre and post test

A pre and post-test provided statistic information to know if the application of dialogues improved students' speaking. They also answered research questions one (fluency), two (vocabulary), and three (accuracy). To this end, recordings were graded using a rubric that included components: fluency (speaking spontaneously and without many pauses), vocabulary (technical vocabulary), and accuracy (grammatically correct ideas, phrases, or chunks). The recordings that were considered to answer the research questions were the first (pre-test) and the last (post-test). The highest grade for each component was 5 and the lowest 1. The maximum grade students could get was 15. It was expected that students start with an average of the lowest band and move to the second band. To avoid bias in the results, the post-test were graded by a colleague.

Survey

There were two types of surveys. The pre-survey was developed to get demographic information of students to better describe them. This survey was made up of four questions. They were multiple choice, but in some cases, it asked the students to provide reasons of their responses. This survey also included items with a Liker scale that goes from Totally Disagree to Totally Agree. The items were taken from the literature review regarding speaking difficulties. There was also a section about classroom activities in general, in speaking specifically, and pair work to know background information of students about their previous learning experiences.

The post survey included a Likert scale. The items related to students' feelings when speaking, components of the innovation, speaking activities they practiced, dialogues, and pair work. Similar items were compared to determine if students changed their perspectives as result of the innovation.

Both surveys were built in groups of ideas according to each main variable, following Knezek and Christensen (2017) procedure. The section of the Likert scale provided data to answer research question number four about students' perspectives towards the innovation. The surveys were piloted with a different group to improve the instrument. It was validated by three experts.

Data Analysis

The information from the pre and post-test was entered in a spreadsheet. Then, the data was exported to the SPSS. This program provided descriptive statistics, like minimum, maximum, mean, and standard deviation. This data was compared and contrasted to know if there was an improvement. The mean and the standard deviation were entered in an online calculator to get the effect size and determine if the use of dialogues had an impact in speaking.

The information from the surveys was coded and registered in a spreadsheet. Later, it was reported in a table with the means to determine if the perspectives of students prior and after the innovation changed.

Ethical considerations

In order to carry out this study, permission was granted from the authorities. Students were informed about the objectives of the study and the procedures. They were assured that all data obtained from this research was confidential and for academic purposes. The instruments were validated by experts and piloted other classes to raise reliability. The instruments included a legend with the purpose of the study and a reminder to students that their participation was voluntary.

<div align="center">

Results

</div>

This section reports the results of the innovation. It is organized according to the research questions. Relevant tables were added to visualize the results. It is important to notice that there were positive results even though students sometimes missed or arrived late to class. Their main excuse was that they did not live in Guayaquil but in nearby cities.

The first research questions addressed to what extent dialogues improved fluency. Table 1 shows that there was an improvement in this component of the rubric. It means students spoke spontaneously and without many pauses. The result of $p = .000$ indicates that the results are statistically significant and due to the innovation. Cohen's d shows that the innovation has an impact on learning.

Table 1

Results of pre and posttest for Fluency

	Min	Max	Mean	SD	*P* value	Cohen's *d*
Pre	1	3	1.75	.716	.000	3.13
Post	3	5	3.95	.686		

The second research question referred to the incidence of dialogues in terms of

vocabulary. Table 2 evidences an improvement as result of the innovation, $p=.000$

indicates that the results were statistically significant. It can be said that it was due to

dialogues and not to any other variable. There is a large impact for learning, too

(Cohen's d=3.17).

Table 2

Results of pre and post-test for vocabulary

	Min	Max	Mean	SD	P value	Cohen's d
Pre	1	3	2.15	.671	.000	3.17
Post	3	5	4.10	.553		

The third research question involved accuracy (grammatically correct

utterances). Results shown in table 3 indicate that in this component there was also a

statistically significant improvement ($p=.000$). Cohen's $d = 2.63$ displays a large impact

for learning.

Table 3

Results of pre and post-test for vocabulary

	Min	Max	Mean	SD	P value	Cohen's d
Pre	1	3	2.05	.759	.000	2.63
Post	3	5	3.90	.641		

Although interaction was not considered for this study, post-test results also

evidence a large impact for learning (Cohen's d= 3.07) that is statistically significant

(p=.000). Table 4 summarizes these results.

Table 4

Results of pre and post-test for interaction

	Min	Max	Mean	SD	P value	Cohen's d
Pre	1	3	2.25	.716	,000	3.07
Post	3	5	4.40	.681		

These results indicate that there was improvement in all components of the rubric to a large extent. They are all statistically significant and have great impact for learning. From all components that the rubric evaluated for speaking, the one that improved the most was vocabulary, and the lowest was for accuracy. This may be due to students arriving late to class and having to catch up on the activities.

The last question determined if student's perspectives were the same or different after the innovation. The following table summarizes the most relevant changes from pre and post results of the intervention for the variables of this study. There was a change in students' perspectives from their feelings when they speak which were negative (totally agree=5) at the beginning to positive at the end (totally disagree=1). Complete results are in appendix 5. On the other hand, there was a low mean for the items that involved the aspects of planning and recording the dialogue in the pre-test. That result improved in the post-survey which indicates that students structured what they were going to record.

Table 5

Pre and post results of survey

When you speak in English, you …	Pre	Post
Feel confused for not knowing what to say.	3.15	1.87
Feel afraid of making mistakes pronunciation, grammar.	3.61	1.75
Translate everything you want to say.	3.46	1.77
Can't continue the conversation because of lack of vocabulary.	3.29	1.75

Speak with not many pauses.	3.54	1.8
Planning and Recording the Dialogue	*Pre*	*Post*
Created dialogues to practice with peers.	2.49	3.48
Write a dialogue from ideas from the book.	2.49	3.9
Write a dialogue about a conversation related to your field.	2.44	3.9
Practice a dialogue about general ideas.	2.78	4
Practice a dialogue related to Net and Telecommunication.	2.73	3.78

In the next table, the items on the left were in included in the pre-survey and the ones on the right were added in the post-survey. Students checked the answers of neutral and disagree (3-2) at the beginning, and the tendency moved to agree and totally agree at the end.

Pair work				
Pair work is useful to practice speaking.	2.68	We worked equally.		3.97
Pair work for speaking is difficult because the student who knows more dominates the conversation.	3.02	We agreed in the flow of the conversation.		3.75
It is not advisable because some pairs speak slowly.	2.73	It was easy to work in pairs to give more ideas.		3.92
It is not advisable because some pairs do not pronounce correctly.	2.80	There was interaction when planning the dialogue.		3.88
The pair makes constant interruptions.	2.90	There was interaction when practicing.		4.55
		There was interaction during the recording.		4.22

The following results reflect students' perspectives towards the innovation. These items were included in the post-survey. The mean of each item refer to neutral (3), agree (4), and totally agree (5).

Table 6

Post-survey results of innovation

Writing the dialogue helped me recall vocabulary.	3.72
Practice made me speak more spontaneously, correctly, improve my pronunciation, and intonation.	4.16
When we recorded the dialogues, I did not have many pauses.	4.30
Practice the dialogues made me aware of grammar structures.	4.35
Dialogues are useful to practice speaking.	4.12
Dialogues are difficult because the student who knows more dominates the conversation.	3.80
It is not advisable because some pairs speak slowly.	3.70
It is not advisable because some pairs do not pronounce correctly.	3.82
The pair makes constant interruptions during the dialogue.	3.92

All in all, students responded well to the activities of the innovation. Thus, the positive results evidence the impact of recording dialogues to improve speaking in general, and specifically in fluency, and accuracy. This practice also contributed to expand students' knowledge of technical vocabulary. Their points of view demonstrate that they agreed to this implementation.

Discussion

It is important to compare and contrast the results of this study to those of previous studies. Other researchers included in the literature review had applied recordings differently from how it was implemented here. That reflects a gap that was

needed to be reduced. The following paragraphs have been organized according to the research questions.

To what extent does pair work through dialogues improve spoken fluency? There are different perspectives to speaking. Some authors consider linguistic features like vocabulary and grammar (Derakhshan, Tahery, & Mirarab, 2015), others mention decisions about topic, organization or ideas, structure of the message, and responding to the listeners' feedback (Lucas, 2001). For Backlund (as cited in Al-Eiadeh, et al, 2016), the same topics are classified into social, personal and content knowledge. By the time of recording the first time and practicing fluency, deficiencies were detected in the creation of dialogues. Students were very slow and unclear. In the analysis of results they managed to create more spontaneous dialogues, certainty when speaking and a fluid expression of their interpretation when working in pairs. This may be the effect of including the social (pair work), personal (students' individual contributions to the task), and content knowledge (technical vocabulary) as stated by Blacklund.

Lucas (2001) contributed with some decisions that students make when they speak; for example: being knowledgeable of the topic, organizing thoughts into spoken ideas, structuring the message, and responding to the listeners' feedback. In this study, students did not respond to feedback; but, they were knowledgeable of the topic, they organized theirs thoughts in writing, and practiced several times to record the voice message that was uploaded to the Whatsapp group.

Passages chosen were related to their field of study, Backlund (as cited in Al-Eiadeh, et al., 2016) referred to this as content knowledge. Thus, this component may have helped students become fluent at the end of the innovation. Students structuring their messages, as Lucas (2001) suggested may have impacted the positive results in accuracy.

To what extent will dialogues improve vocabulary? Implementing vocabulary not only aims to understand linguistic characteristics, but also implies interpreting and knowing the meaning of the message (Derakhshan, Tahery, & Mirarab, 2015). By the time of recording the first time, the vocabulary was very limited, there was no way to build relevant dialogues that were understood by the couple. When applying the work using a technical vocabulary. In the analysis of post-recordings, it was determined that students produced coherent sentences and phrases connected with the words and topics that were introduced.

Authors (Mahraj, 2018; Wanpen, Sonkoontod, & Nonkukhetkhong, 2013) coincide that technical vocabulary is an important factor in the career of students. Students find it useful to be familiar with technical words, since they can communicate and convey meaning. It was noticed that students did not translate the passages but they structure the dialogues according to the main ideas of the content. Wanpen, et al. (2013) sustained that the meaning of the words can be unique is they are used in specific areas. The technical words for students of Net and Telecommunications are similar in English and Spanish. Therefore, that connection may have contributed to the improvement in speaking of this study.

To what extent will dialogues improve students' accuracy? Accuracy goes hand in hand with vocabulary and fluency at the level of speech, it is the ability to produce correct dialogues. As suggested by Celce-Murcia (2001), Jacobs and Farrel (2003), students had extended and meaningful practice. Celce-Murcia (2001) recommended structuring and planning the speaking activities. This structure and planning was done by students. They created the lines that were recorded in pairs. The teacher monitored their work. It was noticed that all students participated. Students needed time to plan and record their dialogues. They were engaged and involved until they finished the activity.

Do students' perspectives change after the innovation? Regarding speaking, students considered they had problems when they spoke (confusion, afraid of making mistakes, long pauses, lack of vocabulary). After the innovation, those opinions were reduced. Students' responses to the survey indicated that they had not been exposed to the process of writing dialogues and recording them. They did not believe in pair work. They considered it useless, and difficult due to circumstances like: pairs speaking slowly, mispronunciation, and interruptions. That perspective also changed to positive reactions towards pair work. In terms of the innovation, students gave the highest scores to recording dialogues to improve fluency, and accuracy.

These positive perspectives towards the variable of the innovation may have been due to the principles of CLT applied: focusing on the role of learner, teaching the process, emphasizing on meaning, and connecting school to the real world. With pair work, these students relied less on the teacher. This means they were becoming autonomous learners (Jacobs & Farrell, 2003).

Conclusions

Due to students' scarce oral participation in classes, this innovation tried to help students overcome that limitation. Pair work and recording of dialogues were implemented to improve students' oral production. Another component was that technical English related to their field of study was included in the lessons. Students had to plan and organize their thoughts in writing before they recorded the dialogues.

The first recordings were short, they were simple, and they had communication errors. Sharing passages that connected content of students' interest to create dialogues had a great impact on speaking skills and its components: fluency, accuracy, vocabulary, and interaction. All students had the opportunity to participate, it was a student-centered activity.

It was observed that students did not need the teacher to structure their conversations. Thus, this student-centered activity raised students' autonomy and self-confidence in their speaking production. Another interesting note was that students did not only listen to their recordings but those of others. They could have been comparing and contrasting their work.

To conclude, the implementation of this innovation not only upgraded students' speaking but it also changed their perspectives towards pair work and speaking itself. They considered the components of this innovation helped them improve in accuracy, pronunciation, and fluency. This research extended the positive quantitative results to a kind of autonomy, confidence, and extended listening.

Limitations and Recommendations

In the research process, one of the main limitations was to analyze and select the materials to prepare the lesson plan. There is a lack of resources in the educational institution. However, it was possible to adapt activities so they do not require the use of other technology like: projectors, computers, or the internet. It is suggested to determine the level of the students to select the material according to their proficiency.

There was not a control group. The teacher-researcher implemented the innovation in the two groups that he was assigned because they both had speaking difficulties. For future research, a control group can be considered to make results more reliable.

In order to better explain or support quantitative results, interviews should be carried out. This will lead to richer conclusions. Parts of the survey can be turned into questions to get information that reinforces the quantitative data.

There were some organization limitations like crowded classes, and poor attendance of students. They usually arrived late because they travel to the university

from their hometowns which are located nearby, for example: Milagro, Yaguachi, and Babahoyo. Sometimes they reported to have economic problems to pay the transportation.

Lastly, students were expected to use the computers in the laboratory to record their dialogues and to search for information to improve the draft they had made in classes. However, there was a protocol to ask for the room. Since it was available for all faculty and due to the limited amount of time that the class could use the laboratory, students used their mobile phones to record the dialogues. It was specially challenging to monitor and practice speaking in the computer lab in the institution where this action research took place for different reasons, namely: Not everyone could upload their work to the platforms because the microphones did not work appropriately, limited connectivity, the time was not enough, and there were not computers for each student.

References

Al-Eiadeh, A., Al.Sobh, M., Al-Zoubi, S., Al-Khasawneh, F. (2016). Improving English language speaking skills of Ajloun National university students. *International Journal of English and Education, 5*(3), 181-195. Retrieved from https://www.researchgate.net/project/Article-Low-Academic-Achievement-Causes-and-Results

Barnawi, Osman. (2011). *Examining Formative Evaluation of an English for Specific Purposes Program.* (Master's Thesis). Retrieved from https://search.proquest.com/docview/867369327/7BFD87DD91074940PQ/1?accountid=174323

British Council. (2015). *English in Argentina*. Retrieved from https://englishagenda.britishcouncil.org/sites/default/files/attachments/english_in_argentina.pdf

Celce-Murcia, M. (2001). *Teaching English as a Second Language or Foreign Language* (2nd. Ed.). New York: Newbury House.

Consejo de Educación Superior. (2013). *Reglamento de Régimen Académico*. Retrieved from http://www.ces.gob.ec/lotaip/2017/Diciembre/Anexos%20Procu/An-lit-a2-Reglamento%20de%20R%C3%A9gimen%20Acad%C3%A9mico.pdf

Council of Europe. (2018). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment.* Cambridge, UK: Cambridge University Press

Derakhshan, A., Khalili, A., & Beheshti, F. (2016). Developing EFL learner's speaking ability, accuracy and fluency. *English Language and Literature Studies, 6*(2), 177-186. Retrieved from https://www.researchgate.net/publication/303498787_Developing_EFL_Learner's_Speaking_Ability_Accuracy_and_Fluency

Derakhshan, A., Tahery, F., & Mirarab, N. (2015). Helping adult and young learner to communicate in speaking classes with confidence. *Mediterranean Journal of Social Science, 6*(2), 520-525. Doi: 10.5901/mjss.2015.v6n2p520

Jacobs, G., & Farrell, T. (2003). Understanding and Implementing the CLT (Communicative Language Teaching) Paradigm. *RELC Journal, 35*(5), 5-30. doi: https://doi.org/10.1177/003368820303400102

Krebt, D. M. (2017). The effectiveness of role play techniques in teaching speaking for EFL college students. *Journal of Language Teaching and Research, 8*(5), 863-870. Doi: 10.17507/jltr.0805.04

Lucas, S. E. (2001). *The Art of Public Speaking.* (7th Ed.). Singapore: McGraw-Hill.

Mahraj, M. (2018). Teaching technical vocabulary through word formation rules. *ESP International Arab Journal of English for Specific Purposes, 1*(1), 37-44. Retrieved from https://www.researchgate.net/publication/327449200_Teaching_Technical_Vocabulary_through_Word_Formation_Rules

Ministerio de Educación de Chile (2012). *Decreto 2960* [Agreement 2960]. Retrieved from https://www.curriculumnacional.cl/614/w3-propertyvalue-52050.html

Ministerio de Educación de Colombia. (2018). *Lengua Extranjera* [Foreign Language]. Retrieved from https://www.mineducacion.gov.co/1759/w3-article-364450.html

Ministerio de Educación de Ecuador. (2016). Lengua Extranjera [Foreign Language]. Retrieved from https://educacion.gob.ec/curriculo-lengua-extranjera/

Ministerio de Telecomunicaciones y de la Sociedad de la Información. (2016) *Plan Nacional de Telecomunicaciones y Tecnologías de Información del Ecuador 2016-2021.* [National Plan of Telecommunications and Information Technologies of

Ecuador 2016-2021] Retrieved from https://www.telecomunicaciones.gob.ec/wp-content/uploads/2016/08/Plan-de-Telecomunicaciones-y-TI..pdf

Rashtchi, M., & Khoshnevisan, B. (2008). Audiotaped dialogue journal: A technique to improve speaking skill of Iranian EFL learners. *The Journal of Applied Linguistics, 1*(3), 164-176. Retrieved from https://www.researchgate.net/publication/306959487_Audiotaped_Dialogue_Journal_A_Technique_to_Improve_Speaking_Skill_of_Iranian_EFL_Learners

Ravid, R. (2015). *Practical Statistics for Educators*. New York: Rowman & Littlefield.

Roeders, P. (1997). *Learning together*. Lima: WALKIRIA Cultural Society.

Rojas E., M. A., & Arteaga S., S. M. (2019). Perceptions about self-recording videos to develop EFL speaking skills in two Ecuadorian universities. *Journal of Language Teaching and Research, 10*(1), 60-67. Doi: 10.17507/jltr.1001.07

Tran, H. N. (2016). *EFL students' and teachers' perspectives on the use of role-play in teaching English in the Vietnamese context*. (Doctoral dissertation). Retrieved from https://search.proquest.com/docview/1868414593/DD805B54196B4251PQ/2?accountid=174323

Wanpen, S., Sonkoontod, K., & Nonkukhetkhong, K. (2013). Technical vocabulary proficiencies and vocabulary learning strategies of engineering students. *Procedia - Social and Behavioral Sciences, 88*, 312-320. Retrieved from https://core.ac.uk/download/pdf/82380139.pdf

Appendix 1

Student's Demographic Information (Pre-survey)

Estimados Estudiantes:

La información de la siguiente encuesta se utilizará para el estudio denominado "Dialogues to Improve Spoken Fluency for University Students of the Network and Telecommunications Careers" (Diálogos para mejorar la fluidez en el habla de los estudiantes universitarios de la carrera de Redes y Telecomunicaciones". Los datos obtenidos en este instrumento se tratarán con estricta confidencialidad.

Gracias por su participación libre y voluntaria.

Atentamente,

Lic. Xavier Viteri

Candidato a Master.

===

Name:

Age: **Date:**

Read and select reasonably the option you consider.

1. How many hours a week do you practice English outside classes?

   A. None
   B. Less than one hour
   C. 2 – 4 hours
   D. More than 5 hours.

3. Do you speak in English for any reason?
   A.   Yes. Indicate when and with whom:_____
   B.   No. Explain why_____

4. Do you use technology to learn English?
   A. Yes. Which _____
   B. No. Explain why _____

5.   Is it important for you that the teacher uses technology in the classroom? Technology:

   A. Yes

B. No.
C. Neutral.

Regarding Speaking.

When you speak in English, you …	Totally Disagree	Disagree	Neutral	Agree	Totally agree
Feel confused about the topic					
Feel confused for not knowing what to say.					
Feel anxious to respond quickly.					
Feel anxious trying to look for words to respond correctly.					
Feel anxious because you cannot translate what you want to say.					
Feel afraid of making mistakes in pronunciation.					
Feel afraid of making grammar mistakes.					
Translate everything you want to say.					
Can't structure a sentence.					
Can't continue the conversation because of lack of vocabulary.					
Feel embarrassed of making mistakes.					
Are not confident enough to speak in English.					
Don´t understand what the other person is saying.					
Speak with not many pauses.					
Consider you speak correctly.					
Have a good intonation of questions.					

	Never	Sometimes	Frequently	Usually	Always
Have a good intonation of sentences.					
Have a good pronunciation.					
Speak sponstaneously.					
Can interact with the interlocutor.					

What kind of activities do you do in your English classes?

Activities	Never	Sometimes	Frequently	Usually	Always
Fill in the space with correct grammar.					
Write correct answers to questions to practice grammar.					
Practice specific vocabulary in writing of an activity or topic from the book (general English).					
Practice specific vocabulary orally of an activity or topic from the book (general English).					
Practice technical vocabulary about Net and Telecommunication in writing of an activity or topic from the book.					
Practice technical vocabulary about Net and Telecommunication orally of an activity or topic from the book.					
Oral practice with vocabulary of personal interests.					
Written practice with vocabulary of personal interests.					
Oral pair work activities in the classroom.					
Pair work in writing activities in the classroom.					

Pair work in general outside the classroom.					
Speaking activities **You have….**					
Created a short speech.					
Made an oral presentation.					
Participated in a forum.					
Commented on a general topic.					
Commented on a topic related to your career.					
Created dialogues to practice with peers.					
Write a dialogue from ideas from the book.					
Write a dialogue about a conversation related to your field.					
Practice a dialogue about general ideas.					
Practice a dialogue related to Net and Telecommunication.					
Pair work					
Pair work is useful to practice speaking.					
Pair work for speaking is difficult because the student who knows more dominates the conversation.					
It is not advisable because some pairs speak slowly.					
It is not advisable because some pairs do not pronounce correctly.					
The pair makes constant interruptions.					

Appendix 2

Student's Perspectives (post-survey)

Estimados Estudiantes:

La información de la siguiente encuesta se utilizará para el estudio denominado "Dialogues to Improve Spoken Fluency for University Students of the Network and Telecommunications Careers" (Diálogos para mejorar la fluidez en el habla de los estudiantes universitarios de la carrera de Redes y Telecomunicaciones". Los datos obtenidos en este instrumento se tratarán con estricta confidencialidad.

Gracias por su participación libre y voluntaria.

Atentamente,

Lic. Xavier Viteri

Candidato a Master.

==

Name:

Age: **Date:**

Read and select reasonably the option you consider.

Regarding Speaking.

When you speak in English, you …	Totally Disagree	Disagree	Neutral	Agree	Totally agree
Feel confused about the topic					
Feel confused for not knowing what to say.					
Feel anxious to respond quickly.					
Feel anxious trying to look for words to respond correctly.					
Feel anxious because you cannot translate what you want to say.					
Feel afraid of making mistakes in pronunciation.					

Feel afraid of making grammar mistakes.					
Translate everything you want to say.					
Can't structure a sentence.					
Can't continue the conversation because of lack of vocabulary.					
Feel embarrassed of making mistakes.					
Are not confident enough to speak in English.					
Don´t understand what the other person is saying.					
Speak with not many pauses.					
Consider you speak correctly.					
Have a good intonation of questions.					
Have a good intonation of sentences.					
Have a good pronunciation.					
Speak spontaneously.					
Can interact with the interlocutor.					
The innovation					
Writing the dialogue helped me recall vocabulary.					
Practice made me speak more spontaneously.					
When we recorded the dialogues, I did not have many pauses.					
Practice the dialogues help me improve my pronunciation.					

	Never	Sometimes	Frequently	Usually	Always
Practice the dialogues help me improve my intonation.					
Practice the dialogues made me aware of grammar structures.					
Practice the dialogues help me speak correctly.					
Activities	**Never**	**Sometimes**	**Frequently**	**Usually**	**Always**
Speaking activities **You have….**					
Created dialogues to practice with peers.					
Write a dialogue from ideas from the book.					
Write a dialogue about a conversation related to your field.					
Practice a dialogue about general ideas.					
Practice a dialogue related to Net and Telecommunication.					
Dialogues					
Dialogues are useful to practice speaking.					
Dialogues are difficult because the student who knows more dominates the conversation.					
It is not advisable because some pairs speak slowly.					
It is not advisable because some pairs do not pronounce correctly.					
The pair makes constant interruptions during the dialogue.					

Pair work					
We worked equally.					
We agreed in the flow of the conversation.					
It was easy to work in pairs to give more ideas.					
There was interaction when planning the dialogue.					
There was interaction when practicing.					
There was interaction during the recording.					

Appendix 3

Rubric

Components	Excellent (4 – 5)	Very good (3)	Good (2)	Needs improvement (1)
Fluency	The dialogue flows as in real life. Students sound spontaneous.	The dialogue flows with very few pauses. Students sound mainly spontaneous in very few cases it seems like a scripted dialogue.	The dialogue flows with some pauses. The dialogue reflects memorization of ideas.	There are many pauses. There is not spontaneity.
Accuracy	The pronunciation is correct. The intonation is excellent. The structure is well used.	The pronunciation is mostly correct. There are very few intonation mistakes. There are minor grammar mistakes.	The pronunciation is sometimes vague. There is not a balance. Sometimes sentences have good intonation. Sometimes the questions have good intonation. There are some grammar mistakes.	There are many pronunciation mistakes. Intonation is rarely observed. There are many grammar mistakes.
Vocabulary	It is appropriate for the context. It is extended. Greetings and leave-taking are used.	It is mostly appropriate. There is a variety of words. Basic greetings and leave-taking are used.	It is somewhat appropriate. There are not many new words. Uses either greetings or leave-takings, but not both.	It is rarely appropriate. There are very few words applied. Greetings and leave-taking are not appropriate or are not observed.
Interaction	Students understand one another. Students negotiate meaning when necessary. There are many interchanges.	Students mainly understand one another. Students most of the time negotiate meaning. There are appropriate interchanges.	Students have to repeat to understand. There is not negotiation of meaning. There are few interchanges.	Students did not practice. Interchanges are only two or three.

Appendix 4

Design from Your Goals

Instructional design of units for transfer of learning to real life contexts

Institution:	**Universidad de Guayaquil**
Year of study:	**1st semester - Level 1**
Student description:	**Students with level A1 Two courses total of 40 students**
(include English Level)	**between 18 and 25 years.**
Professor:	**Xavier Viteri**
Unit title:	**Interview in a real situation**
Weeks:	**6**
Hours:	**36 (6 hours weekly)**

I. Transfer Goal (Stage 1)

Standards the unit will work with:

Overall Spoken Interaction: Can ask and answer simple questions, initiate or respond to

simple statements in areas of immediate need or on very familiar topics.

Conversation: Can make an introduction and use basic greeting and leave-taking

expressions. Can take part in a simple conversation of a basic factual nature on a

predictable topic.

Goal:

I want my students to learn basic greetings and leave-taking expressions so that in the

long run and by their own they can talk about predictable topics related to family and

school.

Breakdown of transfer goal

A. If we see and hear them do this, they CAN transfer this learning.	B. If we see and hear them do this, then they CANNOT (yet) transfer:	C. What I will commit to doing differently in my classroom to ensure my results look like Column A.
Plan and organize a short conversation about a topic that has been introduced in class. Generate the questions. Self – assess students' conversation with the aid of a rubric. Use accurate grammatical structures. I use appropriate technical vocabulary and grammar to communicate ideas. Speak fluently with few pauses.	There are no many interchanges. Students are afraid to speak because of their poor speech management. They fail to maintain a dialogue, or formulate ideas. Students' ideas are difficult, not connected or relevant to the topic. Students cannot use the rubric for self-assessment.	Feedback is given to students to plan and organize their ideas before they practice orally. Vocabulary is practiced, the correct expressions to use and the linking words. Use technology to plan, organize, and record their conversations. Encourage an environment of respect and trust so that they can count on their knowledge without being corrected. Perform constant practices to improve their fluency and participation in classes.

II. Summative Performance Assessment Task (Stage 2)

Goal	Students will have a dialogue regarding topics of their field.
Role	Interviewer or interviewee in a Network and Telecommunications department.
Audience	A telecommunication manager.
Situation	A network or telecommunication company is looking for an engineer. Students are applying for that position.
Performance	Students will ask and answer questions related to their field. They will also provide personal information. They will have to introduce themselves and use basic communication greetings and leave-takings. This interview will be recorded.

Standards	Overall Spoken Interaction: Can ask and answer simple questions, initiate or respond to simple statements in areas of immediate need or on very familiar topics. Conversation: Can make an introduction and use basic greeting and leave-taking expressions. Can take part in a simple conversation of a basic factual nature on a predictable topic.

III. Knowledge and skills the students need to succeed in the assessment. (Stage 1)

What students will need to know	The skills students will need to be able to do
Grammatical structure of questions and answers. Basic greetings and leave-takings. Technical vocabulary according to the topic. Daily routine or everyday vocabulary.	Plan and organize a dialogue. Use understandable pronunciation. Speak spontaneously. Record the dialogues. Self - assess students' dialogues.

IV. Essential Questions (Stage 1)

Essential questions support the transfer goal, signal inquiry, guide instruction, and can be asked over and over throughout the unit without reaching a final answer.
1. How can I speak spontaneously in English? 2. Why is constant practice important when I am practicing a dialogue to improve oral skills? 3. How important is good communication in another language.

V. Learning Activities

   Transfer goal:

   Abbreviated Performance Task:

Learning Activities (from student's perspective)	Intention	A	M	T
Week 1 – (6 hours) Demographic survey Introduction to the topic by the teacher telling about a personal or professional interview his anecdotes, results and a reflection of some mistake made.	**Hook** **Initiating**	X		
Ask students to form pairs to make a reflection that they have experienced when speaking, have a dialogue in English and then discuss their results.	**Initiating**		X	
The students in pairs observe two videos: one formal (a job interview), and an informal one (family or friend conversation). They determine the expressions according to the situation to create dialogues.		X	X	
After each unit, students will plan and organize a dialogue. Then, they will practice in pairs. When they feel it is good, they will tape or record it. This process will be monitored by the teacher who will provide feedback, and examples.	**Formative assessment.** **Developing**	X		
The teacher will model the use of rubric to self-assess the conversation and improve it.			X	
The first video they record will be used as a pre-test.				
Week 2 – (6 hours) Last class content is recalled. New vocabulary is introduced.	Developing			X
Students are given a passage. Comprehension activities are developed.				
After each topic, there is a conversation practice.	**Formative assessment.**			
This practice involves: planning and organizing the dialogue. After that, they will practice in pairs until they are confident to record it. Finally, they will self-assess their interactions with the aid of a rubric.	**Developing**		X	
This week students will do it first, then it will be contrasted with the assessment of the teacher. This is				

to provide more practice on how keep improving their interactions. This week students will work in the "Job interview" unit. Work with the format of: Role: Employer Public: Potential employee. Format: Informative Students will plan and organize a dialogue. Then, they will practice in pairs. When they feel it is good, they will tape or record it. This process will be monitored by the teacher.	**Formative assessment**			X
	Developing	X		
	Formative assessment		X	
Weeks 3 - 4 (12 hours) During the development of the unit, students must enroll in the free application The "Speaky" application that can be used on their cell phones, to start working in pairs and then practice, make a day of work to practice with a Native. The topics that should cover are: 1. Frequently asked questions of a formal conversation. 2. Advice on how to act and express in a formal interview. Students share new vocabulary with peers. For this, they draw, write a sentence, or say the meaning. Students keep planning and structuring their dialogues. They practice before recording their lines. Then they assess their work with the rubric. They should review them before their next recording to keep improving. **Weeks 5 (6 hours)** **The content of this week:** Previous class content is recalled.	**Closure** **Application of research instruments.**			X

New vocabulary is introduced about: -Technical vocabulary of tools and computer inputs**.** -Describing your personality -Describing your goals for the future and why do you want this job They should conduct small dialogues in pairs to practice, record them on their cell phones and pass them on to a Whatsapp group. They will listen to other pairs. **Weeks 6 (6 hours)** Creation of the final recording. With all the practices and feedbacks delivered, they will complete their last recording (post-test). The final project is a conversation of a job interview. Post surveys				

Learning process: A = Acquisition, M = Meaning Making, T = Transfer

Intention: Hook, **formative assessment**, initiating, developing, review, closure**, research**, other.

Indicate Week 1, 2, etc. and number of hours.

VI. On-going Self-Assessment

As I reflect on student learning, what will I do if my plan is not yielding my expected results?
If the innovation is not engaging students, I will implement more activities to improve oral skills by providing supervised practices, work with the students using the rubric, ensure that each one's work is authentic and is following all the steps to form their dialogue in pairs, help students in their fluency, adding technical vocabulary and grammatical structures necessary for their dialogues.

Appendix 5

Results of pre and post-surveys

When you speak in English, you …	Pre	Post
Feel confused about the topic	2.73	2.2
Feel confused for not knowing what to say.	**3.15**	**1.87**
Feel anxious to respond quickly.	3.29	2.07
Feel anxious trying to look for words to respond correctly.	3.90	2.02
Feel anxious because you cannot translate what you want to say.	3.56	2.22
Feel afraid of making mistakes in pronunciation.	**3.80**	**1.62**
Feel afraid of making grammar mistakes.	**3.41**	**1.87**
Translate everything you want to say.	**3.46**	**1.77**
Can't structure a sentence.	2.98	2.35
Can't continue the conversation because of lack of vocabulary.	**3.29**	**1.75**
Feel embarrassed of making mistakes.	3.15	2.02
Are not confident enough to speak in English.	3.15	2.47
Don´t understand what the other person is saying.	3.02	2.2
Speak with not many pauses.	**3.54**	**1.8**
Consider you speak correctly.	**3.10**	**1.8**
Have a good intonation of questions.	3.29	2.35
Have a good intonation of sentences.	3.63	2.35
Have a good pronunciation.	**3.34**	**1.77**
Speak spontaneously.	3.27	2.1
Can interact with the interlocutor.	3.17	2

Writing the dialogue helped me recall vocabulary.	3.72
Practice made me speak more spontaneously, improve my pronunciation, and intonation.	4.15
When we recorded the dialogues, I did not have many pauses.	4.30
Practice the dialogues help me improve my pronunciation.	4.05
Practice the dialogues help me improve my intonation.	4.20
Practice the dialogues made me aware of grammar structures.	4.35
Practice the dialogues help me speak correctly.	4.20
Dialogues are useful to practice speaking.	4.12
Dialogues are difficult because the student who knows more dominates the conversation.	3.80
It is not advisable because some pairs speak slowly.	3.70
It is not advisable because some pairs do not pronounce correctly.	3.82
The pair makes constant interruptions during the dialogue.	3.92

Pair work			
Pair work is useful to practice speaking.	2.68	We worked equally.	3.97
Pair work for speaking is difficult because the student who knows more dominates the conversation.	3.02	We agreed in the flow of the conversation.	3.75
It is not advisable because some pairs speak slowly.	2.73	It was easy to work in pairs to give more ideas.	3.92
It is not advisable because some pairs do not pronounce correctly.	2.80	There was interaction when planning the dialogue.	3.88
The pair makes constant interruptions.	2.90	There was interaction when practicing.	4.55
		There was interaction during the recording.	4.22