

## EFFECT OF THE INTERACTION PATTERNS IN THE LANGUAGE CLASSROOM

## EL EFECTO DE LOS PATRONES DE INTERACCIÓN EN UNA CLASE DE LENGUA

**Luisa Fernanda Ramos Cadena.** Bachelor of Science in Education with Emphasis in Humanities-English, Surcolombiana University. Student of the Master of Science in English Teaching, University of the North. Full-time professor, University of Cartagena. E-mail: rc.luisa@hotmail.com

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**Abstract:** This paper intends to analyze the student's patterns of interaction in a private institution in Cartagena de Indias; the data was collected through classroom observation and analyzed using the FLINT system and a set of principles of instructed language learning. The results show that 67% of the interventions were done by students under the category of peer interaction, which means students asking questions or answering to peers, and 33% were interventions done by the teacher mainly focused on giving directions; regarding Ellis principles, opportunities for output was the most significant finding in the study. It can be observed the most evident patterns preferred by students in social interaction and the importance of teacher scaffolding in the mediation process.

**Key words:** interaction patterns, ZPD, mediation process, scaffolding

**Resumen:** En este trabajo se pretende analizar los patrones de interacción del estudiante en una institución privada en Cartagena de Indias; se recogieron los datos a través de observación en el aula y se analizaron usando el sistema FLINT y un conjunto de principios de aprendizaje de idiomas con las instrucciones. Los resultados muestran que el 67% de las intervenciones fueron realizadas por estudiantes bajo la categoría de interacción entre pares, lo que significa que los estudiantes que hacen preguntas o responder a sus compañeros, y el 33% fueron intervenciones realizadas por el docente centradas principalmente en dar instrucciones; respecto a los principios de Ellis, las oportunidades para la producción fueron el hallazgo más significativo en el estudio. Se pueden observar los más evidentes patrones preferidos por los estudiantes en la interacción social y la importancia del andamiaje que el docente ofrece al estudiante en el proceso de mediación.

**Palabras clave:** patrones de interacción, ZPD, proceso de mediación, andamiaje

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## Introduction

Class interaction is a catalyst of a second language learning process. According to Van Lier (1996), this learning process is a dynamic process moved by the awareness, autonomy, and authenticity principles interrelated with social interaction. In this process is also important the availability of assistance in the exposure of the second language and the principles followed by teachers as a basis to argument and reflect on their teaching actions. Thus, the analysis of the verbal interaction and its relationship with the cognitive processes, the quality of the teachers' assistance in the exposure of the second language and the principles followed by teachers are of relevant importance to implement strategies aimed to foster the cognitive development of our students. Through the analysis of classroom interaction we can discover different categories of the interactive moments where the cognitive processes underlying the learning and teaching actions take place. Furthermore, a classroom can be defined as a social-psychological structure where the learning and teaching processes occur being language the mediator of these processes. Language is used as an interactive vehicle by subjects participating in the process of constructing bonds of communication, that in one way or another permeate the process.

In this paper, we try to explain the most common interactive characteristics in an 6<sup>th</sup> grade English class in a private school in Cartagena city. We also show the scaffolding actions taken by the teacher to assist the process of learning and the application of the Ellis' principles in the classroom interaction.

## Methodology

This analysis was carried out at private school in the city of Cartagena the Indias, this institution counts with more than 60 years in the trade; this institution has based its principles based on the philosophical view of Maria Montessori; cosmic education for peace understood as a proposal that facilitates the harmonic development of the human being, as well as his responsible relationship with the life and the environment. The pedagogical model has a social and a cognitive component according to the beliefs, mission and vision that frames it. It emphasizes in the integration of languages, arts and sciences since it favors the comprehension of the world, the relationship with the being and other cultures and the respect for diversity.

The specific setting for this class interaction analysis is a group of 25 students of 6<sup>th</sup> grade taking English classes. The students are between the ages of 10 and 12 years old and most of them belong to a middle class neighborhood. In addition to this, most of the learners have been studying in this school since primary

so, the majority of them can manage simple communicative situations in L2, even though there are some students that are newcomers that have just initiated the process of learning English and have presented some difficulties. The material used for this group is the book *New American Framework 1A* in addition to any extra material or workshop brought by the teacher. For this particular observation, there was no material in use since the objective of the class aimed mainly to review the use of the present simple of verb to be in order to discover the name of a celebrity; this unit had already been taught during the fourth period and was being reinforced to students through a game called "Guess who." In general, the students are highly motivated to new learning experiences, although there are some disperse cases of classroom management that can be easily controlled.

Once a teacher has stepped into a classroom, the lesson plan is put into action and the process of stimulating interaction is started. The process of sending messages, receiving them and interpreting them within a context is achieved through the interaction. It can be understood as the collaborative exchange of thoughts, feelings, or ideas between two or more people, resulting in a reciprocal effect on each other (Brown, 2001).

When learning a second language, students need to be exposed to the target language, to use the language, to put into action their thinking operations, to be receptive to the exposure of language, to be engaged with the language and apply cognitive, emotional, or physical effort; and the context where these processes can occur is social interaction. (Van Lier, 1996). Thus, in order to get successful learning /teaching actions an interactive classroom environment should be designed. River (1987) says:

Through interaction, students can increase their language store as they listen to or read authentic linguistic material, or even the output of their fellow students in discussion, skits, joint problem-solving tasks, or dialogue journals. In interaction, students can use all they possess of the language in real life exchange. (pp. 4-5)

Considering the sociocultural perspective of language, Vygotsky (1987) declares that language is the main vehicle for human cultural development. According to him, language is a principal communicative tool that is promoted by the constant social interaction of the individual. Hence, learning is firstly mediated in the social plane among a social environment where the individual internalizes patterns of social activities and, then, through a gradual process, adopts them on the psychological plane. In order to measure the difference between the interpersonal and the intrapersonal plane, Vygotsky (1978) created the concept of Zone of Proximal

Development, which is defined as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration of more capable peers” (p.86). This definition, clearly states the difference on the capabilities of the learners, being the actual development what the learner can do without the assistance of an adult and the potential level of development what the learner is able of doing with the help of someone else more proficient. In other words, an individual learning to communicate is highly dependent of the people around its environment. According to Lantolf and Appel (as cited in Moussa, 2005), “the individual learns how to communicate through the guidance of adults which is expressed through the dialogue, interaction and discussion. In such way the child and later on, the learner is receiving support by experts in the learning process” (p. 8).

From a different point of view, Ellis (2005) establishes a set of principles that attempt to provide a basis for language acquisition that serves as guidance for teachers of different settings. Ellis (2005) claims that “These principles address such issues as the nature of second language (L2) competence (as formulaic and rule-based knowledge), the contributions of both focus on meaning and on form, the need to develop both implicit and explicit second language knowledge, the problems posed by the learner's “built-in syllabus”, the roles of input, output and interaction in learning, the importance of catering to individual differences in learners, and the need to assess language learning in terms of both free and controlled production” (p. 209). However, he states that this study does not attempt to generalize language instruction into a set of framed principles, and that there is further research to be done.

This research is a qualitative work; the data was collected through an observation recording. The observation lasted forty minutes and after analyzing the transcript, an excerpt which showed a high frequency of interventions among students and teacher was selected to do the appropriate analysis. In order to determine the frequency of every category, and the interaction patterns among them, it was necessary to quantify each one, as students' and teachers' participations and then group them in a data matrix. The quantified data provides a sufficient corpus to analyze the tendency in the interactivity and cognitive sociability in the learning environment of a classroom.

The interactive discourse in the classroom was analyzed using the Moskowitz model (1971). The FLINT system (Foreign language interaction system) was designed to provide objective feedback about classroom interaction to foreign language teachers, it assesses

nonverbal communications and the kinds and amount of student talk and teacher talk in the target and native languages. This model gives us a framework for evaluating and improving our teaching processes showing us the frequency of intervention between the students and the teacher. It also gives us clues on how our behavior is appropriate in terms of the guidance, counseling and information provided to students as well as the direction and critics given to learners during the class. From the student's perspective, it shows us students' reaction to our questions, and expression of their feelings. Hence, through this interaction analysis we can adjust the feedback and classroom performance in the interest of improving the processes of English language acquisition. In order to get a better analysis of the interaction, we added three further categories that were not included into Moskowitz (1971) categorization. Table 1 shows the final results of this categorization.

In the interest of going into a deeper analysis and find common highlights, the same excerpt was also analyzed under the set of principles of instructed language learning by Ellis (2005):

Principle 1: Instruction needs to ensure that learners develop both a rich repertoire of formulaic expressions and a rule-based competence.

Principle 2: Instruction needs to ensure that learners focus predominantly on meaning.

Principle 3: Instruction needs to ensure that learners also focus on form.

Principle 4: Instruction needs to be predominantly directed at developing implicit knowledge of the L2 while not neglecting explicit knowledge.

Principle 5: Instruction needs to take into account learners' "built-in syllabus".

Principle 6: Successful instructed language learning requires extensive L2 input.

Principle 7: Successful instructed language learning also requires opportunities for output.

Principle 8: The opportunity to interact in the L2 is central to developing L2 proficiency.

Principle 9: Instruction needs to take account of individual differences in learners.

Principle 10: In assessing learners' L2 proficiency it is important to examine free as well as controlled production.

Each turn was analyzed and there was a further categorization for each principle. For instance:

P1: Principle 1, P2: Principle 2, P3: Principle 3, P4: Principle 4, P5: Principle 5, P6: Principle 6, P7:

Principle 7, P8: Principle 8, P9: Principle 9 and P10: Principle 10.

## Results

As mentioned above, this paper intends to explain the most common interactive characteristics in an English class in 6<sup>th</sup> grade in a private school in Cartagena city. It is also shown the use of the scaffolding action by part of the teacher to assist the process of learning and the application of the Ellis' principles in the classroom interaction.

Table 1

*Foreign Language Interaction Analysis (FLINT) system (adapted from Moskowitz, 1971)*

<b>Indirect influence</b>	1. Deal with feelings
	2. Praises or encourages
	2a. Jokes
	2b. Positive feedback
<b>Teacher talk</b>	3. Uses ideas of student
	3a. Repeats student responses verbatim
	4. Ask questions
	4a. Eliciting
	5. Gives information
	5a. Correct without rejection
	5b. Recast
	5c. Scaffolding
	5d. Instruction
	6. Gives directions
<b>Student talk</b>	7. Criticizes student behavior
	7a. Criticizes student responses
	7b. Negative evaluation
	GP. Giving permission
	CU. Check understanding
	8. Student response, specific
	8a. Student response, choral
	8b. Peer interaction (asking questions)
	8c. Peer interaction (answering to peers)
	9. Student response, open-ended or student initiated
	9a. Student response
	9b. Student response, open ended
	9c. Student response, student initiated
	10. Silence
	10a. Silence-AV
	11. Confusion, work oriented
	11a. Confusion, non work-oriented
12. Laughter	
13. Uses the native language	
14. Nonverbal	
15. Peer evaluation	
16. Student ask for directions	
17. Student support peers	

There were a total of 134 interventions, among which 44 corresponded to teacher talk, representing 33% of the total turns in the class. In these 134 interventions, we could find 165 instances that could be classified among the different categories used for this analysis. Among these 165 instances of categories, 69 categories were identified as teacher's instances of interactions, representing 42% of the total interactions. Teacher's indirect influences sum up 18 instances of interactions, representing 11% of the total. Teacher direct influences were 51, representing 32% of the total instances of interaction categories. Students' talks sum up 90 turns, representing the 67% of the total interventions. In these 90 turns, we could find 96 instances of categories of interactions. The results of this categorization are shown in table 2.

According to the results of the “Teacher Talk analysis,” the majority of indirect influence caused by teacher is found in “Eliciting” which appeared 7 times out 165 instances of interventions in the class which represents 5% of total instances classified according to the chart used for this analysis. Then, follow “Ask questions” which appeared 5 times with 3% of the total of the interventions. We can observe lacks of manifestations in the other indirect influences related with “deal with feelings”, “praise or encourages”, “Positive feedback”, “uses ideas of students” and “repeats students' responses verbatim” which appear with 1 instance, representing 1% for each one of these categories. The “Jokes” category does not show any instance. The most common among the direct influences shown in the sample was “give directions” with 16 absolute frequencies representing 10% of the total instances of interventions. Then, “Gives information” and “scaffolding” appear individually 6 times, where each one of these categories represents 4% of the total instances of interventions in the class; and then appeared “negative evaluation” and “recast” with 3 appearances representing 2% of the total participation. “Instructions”, “criticizes students' responses”, “criticizes student's behavior”, “giving permission, and “check understanding appeared 2 or 1 time, with an incidence of 1% for each one of these categories.

In the student participation analysis, it can be observed that the most representative category is “peer

interaction (asking questions),” which appears 32 times, representing 19% of the total instances of interventions. The categories “Peer interaction (answering to peers),” “student response, specific” and “uses the native language” appear individually 14 times, where each one of these categories represents 8% of all the instances of interventions. The category “student support peers” emerges 5 times and represents 3% of the total instances. The categories “Confusion, worked-oriented,” “laughter,” “non-verbal,” as well as, “peer evaluation” appears 4 times with 2% of participation each one among the whole instances. The less common categories are

“student response choral, “silence” and “student asks for direction”, with 1% respectively. Graphic 1 shows the relative distribution of classroom interaction categories.

Most of the questions used during the interactions were knowledge questions, eliciting factual answers and recognition of information. The low level in English proficiency may explain this fact. During the class, teacher had to monitor the students' learning. All the activity was fostered by the teacher. Thus, teacher had to organize the class avoiding the activities which were emotionally or intellectually meaningless to avoid the class to turn into a non-worked oriented class.

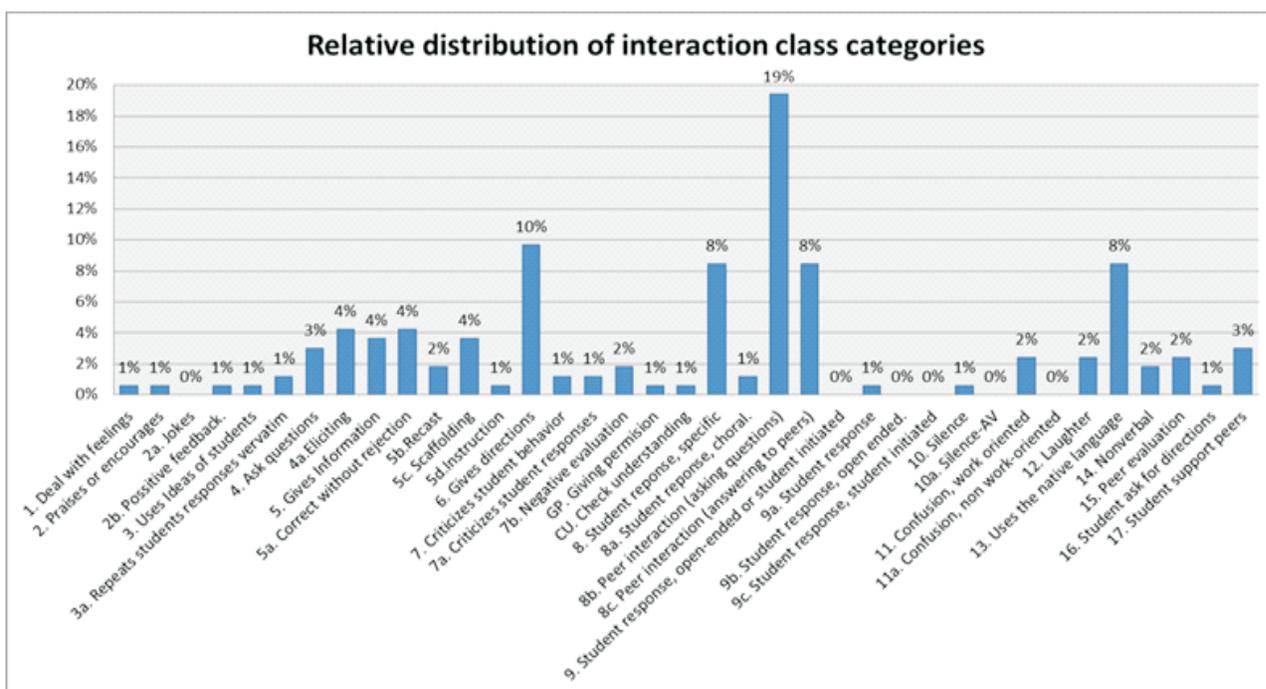
Table 2

*Adapted from Moskowitz (1971) FLINT.*

		Category	# of findings	% of total findings
TEACHER TALK	INDIRECT INFLUENCE	1. Deal with feelings	1	1%
		2. Praises or encourages	1	1%
		2a. Jokes	0	0%
		2b. Positive feedback	1	1%
		3. Uses ideas of students	1	1%
		3a. Repeats students responses verbatim	2	1%
		4. Ask questions	5	3%
		4a. Eliciting	7	4%
	DIRECT INFLUENCE	5. Gives information	6	4%
		5a. Correct without rejection	7	4%
		5b. Recast	3	2%
		5c. Scaffolding	6	4%
		5d. Instruction	1	1%
		6. Gives directions	16	10%
		7. Criticizes student behavior	2	1%
		7a. Criticizes student responses	2	1%
		7b. Negative evaluation	3	2%
GP. Giving permission	1	1%		
CU. Check understanding	1	1%		
STUDENT TALK	8. Student response, specific	14	8%	
	8a. Student response, choral	2	1%	
	8b. Peer interaction (asking questions)	32	19%	
	8c. Peer interaction (answering to peers)	14	8%	
	9. Student response, open-ended or student initiated	0	0%	
	9a. Student response	1	1%	
	9b. Student response, open ended	0	0%	
	9c. Student response, student initiated	0	0%	
	10. Silence	1	1%	
	10a. Silence-AV	0	0%	
	11. Confusion, work oriented	4	2%	
	11a. Confusion non work-oriented	0	0%	
	12. Laughter	4	2%	
	13. Uses the native language	14	8%	
	14. Nonverbal	3	2%	
	15. Peer evaluation	4	2%	
	16. Student ask for directions	1	1%	
17. Student support peers	5	3%		
<b>TOTAL</b>			165	100%

Figure 1

Relative distribution of interaction class categories.



In the teaching and learning process of a second language, the teacher has the responsibility to plan, organize, direct, and evaluate the different variables interacting in this process. Thus, it is important to analyze the basis or principles on which teacher's actions are supported. These principles could be exposed tacitly or explicitly during the allotted time of a class when teaching

and the learning processes are taking place. Even though the analysis of Ellis' principles was made in a separate sheet, it is importance to stress that both processes of the interaction and the application of the Ellis' principles could be overlapped in the process. For this analysis, we considered the same excerpt of the class. The result of this analysis is shown in table 3.

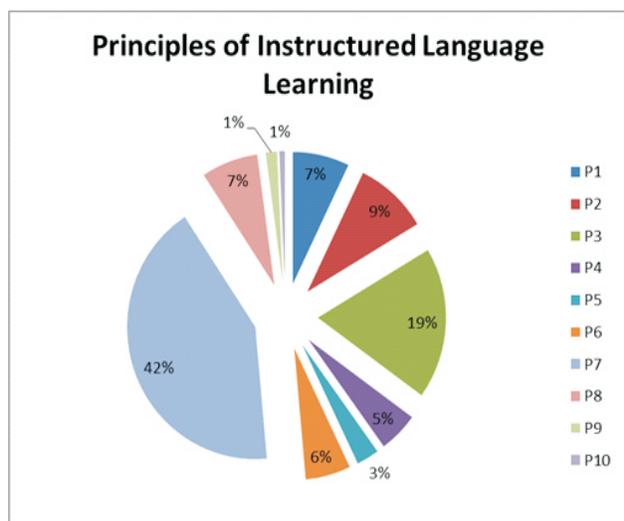
Table 3

Relative frequency of the application of the Ellis' principles.

Principle	Number of finding	% of total findings
P1	10	7%
P2	13	9%
P3	26	19%
P4	7	5%
P5	4	3%
P6	8	6%
P7	59	42%
P8	10	7%
P9	2	1%
P10	1	1%
TOTAL	140	100

The table shows that principle seven, “successful instructed learning also requires opportunities for output”, has the major frequency with 59 appearances representing 42% instances of the total identified principles. Principle three, “Instruction needs to ensure that learners also focus on form”, shows up 26 times with a relative frequency of 19%. In the third place, we could find principle two, “instruction needs to ensure that learners focus predominantly on meaning”, with 13 appearances, representing this 9% of the total of the principle application instances. Principle 1, “instruction needs to ensure that learners develop a rich repertoire of formulaic expression and rule-based competence”, and principle eight, “the opportunity to interact in the second language is central to developing second language proficiency”, have 10 appearances representing 7% of the total identified principles instances. Then, principle six, “successful instructed language learning requires extensive second language input” has 8 absolute frequencies representing 6 % of the total of the frequencies. Principle four, “instructions needs to focus on developing implicit knowledge of the second language while not neglecting explicit knowledge”, appears 7 times, representing 5% of the total instances. Principle five, “instruction needs to take into account the teacher's built-in syllabus”, appears 4 times, representing 3% of the total. Principle nine, “interaction needs to take into account of individual differences in learners”, and principle ten, “in assessing learner's second language proficiency, it is importance to examine free as well as controlled production “ appear 2 and 1 time respectively, representing 1% each one. In Graphic 2, the relative frequencies are shown.

Figure 2  
Relative frequency of the principles of instructed language learning. Ellis (2005)



## Discussion

From the interaction perspective, the analysis of the interaction in the class gives more insights on how our students learn through the engagement in interactions, it also allow us to identify how the teacher facilitates processes providing students with the necessary assistance to help them achieve the learning objectives. In our case, the language learning objective was the use of the verb to be for reinforcement through a game in which the teacher creates a social environment. During this activity, students are provided with opportunities to make meaningful use of the second language through peer interaction for asking questions, for answering to peers, for supporting peers. In her turn, the teacher offers helpful mediation through eliciting, asking questions, giving direction, giving information and scaffolding; all these interacting strategies contribute to the acquisition of a foreign or second language.

We also have to stress in the importance of mediation as a social interaction tool in second language acquisition. So, identifying strategies to assist students as scaffolding and eliciting information from students help learners in the process of acquiring a second language. Thus, the creation of a setting providing a context for the use of the second language is relevant in the process of acquisition of a second language.

The Ellis' principles as a reference in the teaching process also guide teachers in helping students to achieve their learning objectives. So, we can observe how in this class are used some of these principles. In this analysis, principles one, two, three and seven predominate. In these principles, the importance of social interaction, as well as the cognitive aspects, is emphasized.

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