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**Title**

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**Meaning Generation through Teacher/Student Interaction**

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**Presented by Narimane Fatima Mouaïci**

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## **Dedication**

I dedicate this thesis

To my father who could not see this thesis completed;

To my dear mother;

To my faithful friends

To my beloved teachers;

To my wonderful students;

To my respected colleagues;

And

To all dedicated researchers.

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## **Abstract**

The foreign language class is a complex learning environment, where language is used as the means and purpose of instruction. This complexity can be confusing both for teachers and EFL students, and calls for further research on effective teaching strategies likely to cater for the eventual learning difficulties that arise in class. As a result, the responsibility is put on teachers to design interaction strategies flexible enough to be incorporated in the middle of a conversation, and reliable enough to be adapted as learning frameworks. Exploring the role of classroom interaction in meaningful EFL learning relies on identification and analysis of the role of Teacher-Student Interaction' (T/S interaction) in the process of meaning-making in the EFL class. A mixed case study research is undertaken in three different secondary schools. Classroom observations and unstructured interviews are used in five EFL teachers' classes. Ten one hour long lessons were recorded, transcribed and analysed quantitatively and qualitatively for the sake of this study. The aim of this research is threefold. A- To explore the patterns and roles of T/S interaction in inductive teaching. B- To determine how T/S interaction strategies impact the students' meaning-making processes within inductive teaching. C- To analyse the semiosis of vocabulary learning in EFL classes. The results show a higher rate of T/S interactions within three plenary lesson phases which prioritise inquiry. That indicates that T/S interactions are conducted strategically to guide learners' inquiry processes toward solving their learning difficulties. The lesson scripts were analysed pragmatically using an interaction analysis model that takes into account the problem-solving aspect of T/S interaction. Particular attention is given to the thinking processes and the lesson procedures involved in meanings generation, as a semiotic model is applied to the vocabulary lessons to analyse the learning progression of learners. The resulting model helps schematise how learners' inference is guided toward a systematic interpretation of classroom verbal and visual signs.

## List of Abbreviations

[AnsL1L2] Answer in Native Languages  
[CorA] Correct Answer  
[ESP] Echoing Students Response  
[FSA] Full Sentence Answer.  
[GA] Gesture Answer  
[IncA] Incorrect Answer  
[OWA] One Word Answer  
[PeerCor] Peer Correction  
[PR] Positive Reinforcement  
[SA] Silent Answer  
[SC] Subordinate Clause  
[SelfCor] Self Correction  
C R C Closed-Response Checking (Plenary phase)  
CBLT Competence Based Language Teaching  
CC Communicative Competence  
CL Classroom Language  
CLT Communicative Language Teaching  
EFL English as a Foreign Language  
ELT English Language Teaching TBI Task-based Instruction TBLT Task-based Language Teaching  
FLL Foreign Language Learner  
IA Interaction Analysis  
IN Interactional Competence  
IRF Initiation-Response-Feedback  
FInsRF Feedback - Instruction- Response- Feedback  
L1 First Language (Tamazight/ Arabic)  
L2 Second Language (French)  
LCA Learner-Centred Approach  
MNE The Ministry of National Education (Ministère de l'Éducation Nationale)  
ONPS The National Office for School Publications (Office National des Publications Scolaires)  
ORC Open-Response Checking (Plenary phase Open Anserrs Response Checking)  
PC Pragmatic Competence  
PI Plenary Instruction (Plenary phase)  
S Student  
Ss Students  
T/S Interaction Teacher/Student Interaction  
T Teacher  
TFC Teacher Fronted Class  
TL Target Language  
TGI Teacher-guided Enquiry

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# **General Introduction**

Background of the study:

The primary role of language in society is the facilitation of human communications. People use language to interact and exchange meaningful utterances on a daily basis. All language forms either written or spoken are of equal importance in making and maintaining human relations worldwide. The status of English as an international language gives it an important place in the Algerian educational system. In an effort to help Algerian students keep up with the ever-growing technologically connected world, English is being taught as the second foreign language as early as the middle and secondary levels of education. It has also been incorporated into most universities courses.

By the time they reach university, Algerian students are expected to have studied English for no less than seven years. One is then entitled to assume that most Algerian students have enough mastery of the English language to enable them to converse meaningfully with other speakers of English. The ability to interact effectively is a key element for assessing the learners' efficiency in a foreign language. One major concern of education practitioners is to design programs and apply teaching approaches that will support and facilitate the effective learning of English as a foreign language in Algerian schools.

The major efforts of the Educational Reforms of 2003 and 2005 are directed toward applying principles of communicative language teaching that encourage meaningful language learning in an authentic environment for the sake of genuine communication. In addition, the implication of the Competency-Based Approach (CBA) to foreign language teaching stipulates that learners learn by doing and by performing specific tasks in pairs or in groups to increase the chances of interacting in the target language in class. Additionally, the official Algerian syllabus of secondary education EFL teaching combines elements from the Learner-Centred Approach (LCA) with a constructivist approach and emphasises the role of EFL learners in their instruction. Accordingly, the major objective of educational practitioners is to help EFL learners to spend as much time in contact with the target language and to provide them with enough opportunities to practice using the English language and acquire fluency and practical usage of English by the time they graduate. Ultimately, this responsibility lies with teachers.

Existing research recognises the critical role of interaction in language learning/teaching. Many studies focus on the procedural aspect of classroom interaction research. For instance classroom participants turn taking (Sacks, 1965, 1992), functional analysis (Flanders, 1970) of classroom interaction based on a fixed set of variables from which the interaction functions are

extracted. These studies shed light on specific aspects of interaction but do not offer a general view of the dynamics of interaction during the classroom experience.

Other researchers adapt discourse analysis methods to contrast teacher talk and student talk in second language learning (SLL) and English and foreign language learning (EFL) classes. The research on the dialogic discourse of classroom interaction suggests that teachers play a central role in establishing an effective dialogue with learners. Molinari and Mameli (2010) argue that when teacher talk dominates in EFL classes, it hinders the pupils' meaning-making and language-learning progress. That is because teacher-fronted teaching is concerned with the transference of knowledge which may constitute the main barrier to the implementation of truly dialogic teaching. In contrast, the main goal of dialogic discourse practices is to promote communication through authentic interaction during which the teacher helps pupils to discuss, build, and share meanings. In the same vein Nystrand, Wu, Gamoran, Zeiser and Long (2001), assert that teachers play a key role in moving classrooms into dialogic modes, but that requires great effort and skills. In fact, Yashima et al. (2018) assert that knowing when to lesson over-reliance on the traditional IRF interaction sequences affects learning positively by allowing learners to initiate discussions in EFL classes. However, relinquishing control over the direction of learning procedures often lead to opposite results. Learners may experience confusion and lose sight of the overall lesson goals. It is, therefore, the teacher's ability to assess classroom discourse, and knows when to lessen or increase control over interactional instruction that provides the subtle guidance needed to maximise learners' involvement in classroom conversations. Aside from this debate, researchers agree on the fact that when learners engage in interaction with teachers about questions they find difficult, they maximise their involvement in the discussion and challenge their competencies. It is for that reason that teachers adapt dialogic practices to initiate dialogues that target the needed learning difficulties. These practices provide more opportunities for learners to practice critical thinking and language skills in a guided environment. Despite the importance of dialogic learning, no consensus about what constitutes the exact characteristics of these dialogic practices is reached and how they can be implemented in tasks and activities that promote meaning-meaning. (O'Connor and Michaels. 2007, Sybing. 2019)

The primary role of language in society is the facilitation of human communications. People use language to interact and exchange meaningful utterances on a daily basis. All language forms either written or spoken are of equal importance in making and maintaining human relations worldwide. The status of English as an international language gives it an

important place in the Algerian educational system. In an effort to help Algerian students keep up with the ever-growing technologically connected world, English is being taught as the second foreign language as early as the middle and secondary levels of education. It has also been incorporated into most university courses.

Further research into practical classroom interaction issues is required. Furthermore, only a handful of studies target T/S interaction in the context of Algerian EFL secondary education. Berrahoui (2013) studied the positive impact of teacher-student interactions on students' participation and Ferradi (2016) discussed the role of using humour in promoting T/S interaction in EFL classes. The role of Teacher/student interaction in meaning-making within a learner-centred approach (LCA) to EFL teaching/learning is not given sufficient attention.

#### Issue and Thesis Statement:

During preliminary classroom observations, the researcher became aware of a problem frequently faced in EFL classes. Whenever the EFL teacher addresses a question to the class about a supposedly acquired concept or competence, most students react in two different ways. The first response is often characterised by a reluctance to respond in the English language. Students often rely on their first language, showing that they know what is being discussed, but lack the know-how to use it in a correct sentence in the target language. The second common response is to provide a word or a noun phrase remotely related to the question, expressing once more a difficulty in either understanding the question or answering the question.

The usual teacher's response to the ensuing communication gap, is to reiterate a number of easier questions to guide learners in simple words to express their answer. In other cases, a learning deficiency is identified and the teacher leads the conversation to a remedial work to address the issue. Either way, these observations suggest that EFL learners may have difficulty with the process of inferring meaning from teacher verbal signs as a result have difficulty use language effectively and formulating meaningful and coherent responses in speaking and writing in English.

This problem of meaning making may cause more fundamental learning problems, particularly within the inductive teaching environment, making the competence based approach to EFL teaching, completely ineffective, as it relies mostly on the EFL students' ability to infer information from tasks and activities, before using them in innovative situations.

This shows the importance of examining the mechanisms and systems of inference and inquiry within the T/S interactions in the EFL class. These observations influenced the researcher's decision to investigate T/S interactions from the perspective of meaning-making systems.

Starting from the premise that learning a foreign language means acquiring the ability to use that language to successfully interact with other speakers of the same language, which in turn, necessitates the ability to generate and comprehend meaning using the signs of that language, and that interaction or the generation of meaningful signs is an inherent goal of EFL learning, we argue that meaning-making is a collaborative process that is best studied through goal-oriented classroom interaction. Thus, this research adds to the EFL Classroom interaction research which considers the analysis of the dynamics of classroom experience as a precursor for a better understanding of EFL meaningful learning.

This case study develops an argument for the Teacher/Student interaction as a process of inquiry which is at the base of learning a new language. We explain that Teacher/Student face-to-face classroom interactions mediate the learner's ability to generate new meanings by developing learners' abilities to think critically in the EFL classroom. The need to understand the underlying mechanisms and processes of meaning-making in T/S interactions motivate this study. Thus, it will be argued, that if educators seek to make EFL learning more meaningful to EFL learners in both the theoretical and practical sense then, they ought to consider a paradigm shift from perceiving vocabulary acquisition as merely the mechanical memorising of the culturally accepted significance of concepts to the scientific discovery process whereby the meaning of words is discovered through scientific enquiry and interactive dialogic practices in class. This shift in the way meaningful learning is perceived relies on the triadic semiotic theory, which considers meaning as a process of sign interpretation and learning as an interactive and collaborative inquiry process. Further in the research, T/S interactions will be analysed according to the triadic semiotics tradition. Indeed, Peirce's views on education and learning, his triadic sign structure, the process of Semiosis (meaning-making), the mode of inference of abduction and other theoretical concepts from his theory of Pragmaticism, will be referred to in the discussion of data analysis results.

### Aim and Objectives of the Research:

The objective of this research is threefold. 1- Explore the patterns and roles of T/S interaction in inductive teaching. 2- Determine how T/S interaction strategies impact the

students' meaning-making processes within inductive teaching. 3- Analysing the semiosis of vocabulary learning in EFL classes. Three research questions and hypotheses will guide this research as follows

1- What types of classroom interactions are more prevalent in inductive EFL classes and how they are structured within the inductive framework?

The main goal of inductive teaching procedures is to organise students' learning around the use of inductive inference. However, the gap between lesson planning and actual classroom experience leads to questioning of the efficiency of the inductive teaching method in making learning more meaningful and easier for learners. First, we hypothesise that peer interaction is more encouraged in EFL classes in accordance with LCA to teaching. Second, Teachers apply LCA principles in an effort to adapt the syllabus requirements to students learning needs and facilitate students' agency in their own learning process.

2- What types of learning difficulties face EFL learners and what solutions and strategies are offered by teachers?

We hypothesise that learners' communication and comprehension difficulties may hinder learners' meaning-making progress within an inductive classroom environment and that teachers invest in T/S interaction as a key teaching strategy by adopting flexible interactional sequences that respond to specific learning needs. Second, we hypothesise that T/S interaction is organised in the form of inquiry-based dialogues in which learners practice inference and critical thinking.

3- How does classroom semiosis unfold in EFL vocabulary lessons and how new words are learned?

We hypothesise that T/S interaction enables the generation of new meanings through meaning negotiation processes by producing intermediary signs/interpretants that mediate meaning between teacher and student.

During teacher-students interactions, teachers use various tools and strategies to help students make necessary links between previous and new meanings. We believe that learning is a specific case of critical thinking in a semiotic sense and that the key to understanding the interactional and semiotic aspects of learning relies on the detection of hidden habits of

thoughts from which interpretations emerge. For the discovery of inference modes that govern teacher-student interactions, a semiotic framework is used to describe teachers' and students' Interpretants and how they evolve into acquired meaning.

#### Methodology and Scope of the research:

The study took place in the 2016/2017 school year and lasted for four months, from December 2016 to March 2017. Five teachers from four secondary schools in the region of Tizi-Ouzou participated in the study by allowing the researcher to conduct classroom observations and audio recordings as well as by participating in semi-structured interviews. From the thirteen class recording only ten recordings had good sound quality. The targeted population of the study consisted of two freshman-year classes, two sophomore-year classes and one senior-year class. The five female teachers worked in the field of secondary education for more than five years and Students were aware that they were recorded. Ten classroom recordings were randomly chosen as a sample for the analysis. The classroom recording was transcribed in its entirety by keeping the original languages used by the interlocutors. After a thorough quantitative content analysis of the lesson transcripts, the data were analysed qualitatively to highlight the interaction patterns and the communication strategies. Questions were asked of teachers immediately after the class ended to clarify some of their teaching choices and strategies in the previous session. This mixed research study uses a quantitative content analysis, which is embedded in a larger qualitative framework for the quantification of teachers' and students' discourse. Additionally, a qualitative content analysis of the corpus combined with an interaction analysis model is used to explain the relation of T/S interaction with the processes of meaning generation.

This being said, the scope of this research does not include a larger view of students' cognitive processes outside classroom interaction. Thus, it is unable to make any assumptions about the type of learning strategies practised by EFL learners beyond the classroom. It is therefore important to state the limitation of this study. The first constraint is intrinsic to the methodological nature of this research. Indeed, research in social and human sciences aims at interpreting social phenomena in the most accurate way possible. However, it is by design not intended for exactitude. Therefore, just like any undertaken study in human and social research may be expected to undergo a set of imperfections, the present research –regardless of its significant value– would unquestionably bear several limitations that can be summed up in the points that follow.

Methodological and Practical Limitations:

Although research in social and human sciences aims at interpreting social phenomena in the most accurate way possible, it is by design not intended for exactitude. Therefore, just like any undertaken study in human and social research may be expected to undergo a set of imperfections, the present research –regardless of its significant value– would unquestionably bear several limitations that can be summed up in the points that follow.

Time restriction Due to the nature of the theme and the environment in which it was run, time restriction was one of the major issues in completing the present work. Managing data collection time, which consisted of coordinating full class observations and interviews with the participants under tight schedules and at different locations was the most challenging factor in the data collecting phase. The size of the collected corpus, also, demanded a greater amount of time for transcription, organisation and analysis which was taken from the overall time allotted for the research. The scope and quality of data were, also, greatly affected and shaped by the strict time limits the research had to endure. A larger sample of participants and diversified research fields would have added more details and more perspectives to the studied theme and would have, probably, provided more insight into the research problem.

Another time-related restriction has affected the early stages of the research. The researcher faced administrative restrictions to accessing middle and secondary schools in the Wilaya of Tizi-Ouzou, delaying the research for two years. Unfortunately, similar obstacles are a common recurrence for researchers in education. This work has been completed with the hope of better collaboration between secondary and higher educational institutions, in Algeria, for providing the necessary support for researchers and promoting future research in the educational field at all levels of instruction.

The number of participants in this research consists only of a small sample of a larger population of students and teachers in the area of research. Although the ethnographic characteristics of this research population were studied extensively demonstrating the roles and experiences of teachers and students in EFL classes, the restricted number of participants reduces the possibility of generalising the results to similar research fields. A larger sample of students and teachers in different locations may have offered the possibility of comparing results and practices and consequently shed light on different dimensions of the results. Nonetheless, this study offered an interesting insight into the processes of meaning-making in T/S interaction.

Students' participation Although unstructured interviews were conducted with the five teachers of the study, students' contributions to the research were gathered solely from classroom observations and audio recordings. Occasionally, however, students were asked to briefly justify a choice of response (gesture or silence). But, to avoid disturbing them in the middle of a lesson, no further questions were asked. Open-ended questionnaires with students would have been of greater use for a fuller qualitative analysis of their attitudes and opinions if doubled by group interviews. For the sake of this study, though, the aim was to examine learning processes and thought patterns, thus every student was considered a unique individual who experienced class time uniquely and differently from others. No population sample would have been representative enough to account for everybody's interpretations of their learning experiences.

**Classroom Recording** The absence of video recordings is the first noticeable methodological limitation of this research. Reserve towards video recording in class is one of the strongest cultural features of the population of the study. In the visited educational institutions neither students nor teachers were comfortable with the idea of filming them. This resistance may be explained by the fact that the privacy of students and teachers and the institution's working staff is still a sensitive matter. A significant number of important visual data is therefore lost, for instance participants' gestures and body language, as well as explanations as they were written on the board and other visual clues that may have served to help interpret learners' and teachers' silent reactions to different stimuli and signs. Fortunately, however, the researcher is allowed to be an active observer in all recorded classes, thus has made her best to report as faithfully as possible the most significant visual clues for the research.

Despite the obstacles that limited the scope of this research, the focus of the thesis is turned toward a thorough analysis of the subtle pragmatic processes that explain the progression of learning a foreign language in the EFL classroom environment. The research methods and research objectives are designed to study the role of EFL teachers in guiding and facilitating learners' acquisition of the necessary language skills and learning competencies. While the emphasis is placed on the role of T/S interactions processes in helping learners make sense of the EFL syllabus

Having stated the limitations of the research we turn to the overall structure of the thesis chapters. The present research is organised into a theoretical part and a practical part. In the

theoretical part, the literature in the research field was reviewed and key theoretical concepts explained, in addition to the presentation of the methodological design

The present study is organised as follows

I) – Theoretical Part

The General introduction provides the main topics and concepts of the thesis and explores the perspective gaps underlying the thesis, in addition to introducing the research questions and hypothesis.

**Chapter One Literature Review** This chapter consists of a thematic review of the relevant literature on second and foreign language teaching and classroom interaction research, and concludes by drawing connections between previous research and the present research goals and research questions.

**Chapter Two Methodological Design** The first objective of this section is the description of the corpus of this research. Details of the collected Data and the methods of data collection and data analysis are provided.

II) - Practical Part

**Chapter Three The Results of the Study.**

The results of the four analyses conducted in this research are displayed in three sections. The first section shows the results of the quantitative content analysis of the corpus. The second section deals with the results of the qualitative analysis of classroom interactions followed by the results of the qualitative content analysis of lesson procedures, while the third section displays the initial results of the qualitative theme analysis of the teacher's unstructured interviews. The results of the analysis of the interviews show three main categories. 1-Teachers views about S/S and T/S interactions. 2- The difficulties that face EFL learners in inductive teaching procedures. 3- The teaching strategies that teachers use to guide learners during problem-solving learning stages.

**Chapter Four Discussion of the Results**

The discussion chapter is divided into five sections. Each section details the data analysis methods used in the testing of each of the initial hypotheses. The qualitative results and the quantitative results are triangulated in a way that ensures the validity and reliability of the research. Comparison and correlations are undertaken in view of obtaining a multidimensional understanding of the phenomena under study.

The first section Classroom interaction patterns in inductive EFL classes

In this section, we discuss the quantitative analysis results. Particular attention is given to Teacher and Students' Utterances. The number of utterances produced by teachers and students was analysed and compared to determine which of the S/S interaction or T/S interactions was more used in the corpus. In order to discover whether the predominant interaction types serve the inductive teaching objectives, the quantitative results are correlated with the results of the qualitative content analysis of T/S interactions, which reveal the patterns and functions of T/S interaction in the corpus.

The second section The place of T/S interaction in Inductive learning procedures

This section examines the nature of the inductive lesson procedures that were used in the EFL classes and the role of teacher-student interaction in supporting these practices. The aim of this section is to assess whether inductive procedures support teacher/student interactions and how they structure learners' learning stages. A qualitative content analysis was used to analyse the lesson plans devised by teachers. These results are compared with the results of the teachers' unstructured interview results. By discussing the teachers' opinions about their roles in class and their evaluation of the inductive teaching framework in the light of their teaching behaviours, the gaps between their plans and the reality of the classroom experience are revealed.

Section three T/S interaction strategies in teacher-guided classroom inquiry.

The goal of this section is to explore the types of difficulties that students stumble upon. The results of Teachers' interviews describe a number of problematic tasks that are central to inductive teaching, which was supposed to help learners' inductive inference but proved difficult for students. Most students are unable to accomplish these tasks without the teacher's intervention. Teachers express their concerns about those particular times when inductive procedures fail to help learners. The third category of qualitative analysis results shows the solutions and practices that teachers propose to bridge specific learning gaps.

Section four is strategic T/S Interaction sequencing in the inquiry process of discovery learning.

This section describes how T/S interactions are used as a teaching strategy and an inquiry strategy in EFL classes. It is worth noting here, that the research starts with three initial

hypotheses, but two more are added after the second section of the discussion. It is for this reason that two more qualitative correlative analyses are conducted in the fourth and fifth sections of the discussions. Another question derived from the previous section. Which patterns of T/S interaction are used as teaching strategies? A qualitative analysis of the types of T/S interaction sequences in the different lesson plenary phases is conducted. The results reveal a distinction between traditional IRF structures and flexible IRF sequences. The latter pattern appears to be relied upon in the learning stages where T/S interactions are used for inquiry.

The latter results facilitate the next analysis whose aim is to describe the structures and goals of the teacher-guided interactions. The term ‘Teacher-guided interaction’ is coined to account for the dialogues between teachers and students which guide and facilitate the inquiry process. Its primary goal is to guide learners’ meaning-making process in the right places. Another qualitative interaction analysis is conducted to describe how T/S interactions are used to guide learners’ discovery process while conducting an inquiry about tasks and language materials in the EFL class. (in Plenary Lesson Phases)

### Section five A Semiotic Analysis of Meaning-Making in EFL Vocabulary lesson

The section of the discussion chapter discusses the meaning-making processes in EFL classes through a semiotic lens. The objective is to determine the semiosis of language learning, i.e. the interplay of semiotic components within the vocabulary learning process. A T/S interaction analysis model based on the triadic semiotics is used to describe how new words are learned in the EFL class.

### General Conclusion

The general conclusion provides insights from the discussion section. It highlights the significance of the study and its pedagogical implications in light of the research’s methods and findings. It ends with some limitations of the research in addition to a few recommendations for future research. The conclusion is followed by the appendixes section.

The appendixes are divided into three parts. Appendix A contains a list of the open-response questions addressed to each teacher in the unstructured interviews with the interviewers’ responses. The corpus of the lesson transcripts is shown in Appendix B, while appendix C displays the results of the lesson procedures qualitative analysis.

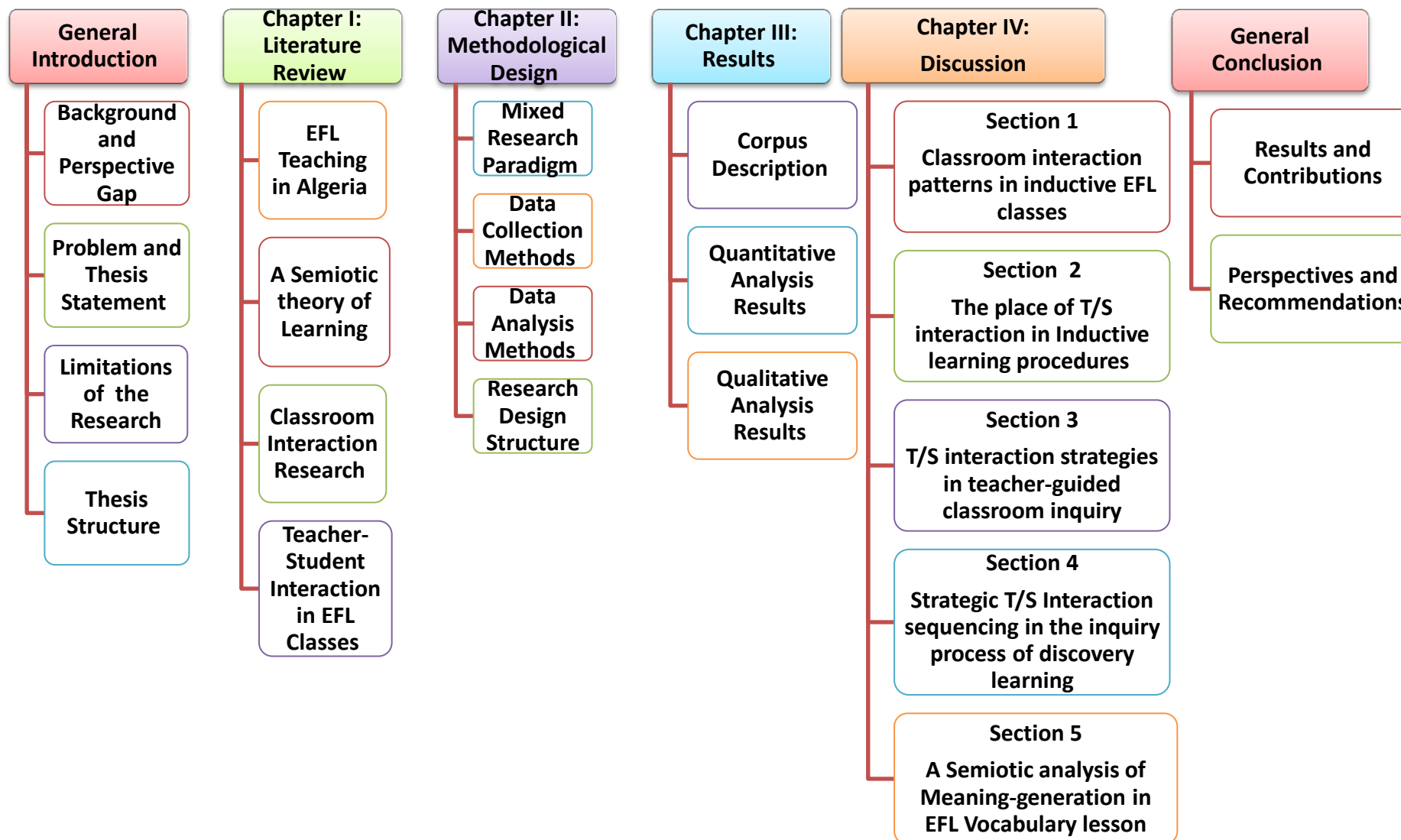


Figure1 Dissertation Map

# **The Theoretical Part**

# **Chapter I**

## **Review of the Literature**

The focus of this dissertation is the analysis of how new meanings are generated in conversation within teacher-student classroom interaction in the EFL secondary education. This literature review aims to uncover the aspects of meaning-making that have been discussed in other studies in the field of EFL education and semiotic studies in education. It also seeks to explore the classroom interaction analysis models that may assist in understanding the dynamics of meaning-making in interaction, particularly in relation to the interlocutors, namely EFL teachers and students. This case study inscribes within the pragmatic educational research paradigm. This thesis examines the processes of meaning generation within classroom interaction.

The primary objective of this chapter is to highlight the role of teacher-student interaction in the process of learning a foreign language. Definitions of key aspects such as classroom interaction, meaningful learning, and important triadic semiotic terminology will be provided. Connections will be made between the current issue, which pertains to the explanation of meaning-making processes within the problem-solving inquiry process, and the issues addressed and resolved by previous research on the topic. By presenting the current state of the literature on the subject of our study, we aim to demonstrate the scope and focus of this dissertation by providing concise explanations of the fundamental theoretical concepts and theories used for data analysis and discussion of the results in the subsequent chapters.

The review starts with a brief description of the Algerian' approaches to English as a foreign language teaching (EFLT), followed by a review of the principles of the Communicative Language Teaching method (CLT), and the Competency-Based Language teaching method. (CBLT), which is followed by a summary of the major difficulties related to the implementation of the Learner-Centered Approach (LCA) in Algerian schools. Next, the semiotic theories of meaning-making in language classes will be reviewed, and the key concepts underlining the current study will be defined. The role interaction in education was presented through a review of different classroom interaction studies. It will be shown along the way, how interaction research needs a pragmatic and semiotic perspective to highlight its crucial role in a meaningful EFL learning environment in Algerian EFL classes.

### **A. Algerian EFL Teaching Design**

Although English is a foreign language in Algeria, it is given much importance by Algerian authorities because of its international status. Unlike French, learners only have very few occasions to encounter English outside the classroom, mainly on TV or the internet. The

learning of English is encouraged by educational policy as “...A means to facilitate a constant communication with the world to have access to modern sciences, (and) modern technologies...” (the National Charter)

With four years of compulsory English courses in middle school, and three years in high school, it is hoped to increase students' contact with the English language. Students also encounter English as a specialized module in almost all university streams. In an attempt to solve the problem of English learning for many students, the Algerian authorities applied a new educational reform starting in 2005. The new Algerian English curriculum of secondary education tends toward gradually implementing some principles of the Learner-Centred approach to EFL Teaching and learning in Secondary education. For instance, learners' autonomy, increasing learners' responsibility in the choice and implementation of learning goals and materials, focusing on extensive student-student interaction and reducing the role of the teacher to a guide and monitor of learners' efforts.

However, too many difficulties prevent the implementation of these principles. Mebitil (2011) summarises the major obstacles to a learner's autonomy. 1- Lack of motivation in learning English, which is mostly absent from their immediate social environment, except for social media. 2- Low level of language proficiency. Students' grammar and vocabulary competencies are not sufficient for a secondary level of education. 3- Lack of appropriate terminology for their fields of study, hence, they encounter a set of problems at different levels especially at the level of inference and critical thinking. To reduce the effect of these lacks on the students' instruction output, the secondary education EFL syllabus is designed to reflect the current learning needs of secondary education learners. The officially issued documents by the Algerian Ministry of National Education explain the aims and methods of the approach which is applied in the elaboration of the secondary education English syllabus after the 2006 educational reforms.

Algerian Secondary School syllabuses consolidate the four main skills listening, speaking, reading, and writing, and the linguistic and communicative competencies acquired earlier, seeking to instil a number of principal objectives through which learners will acquire additional pragmatic competencies like critical thinking, openness to a multicultural world, and the ability to access science and technology to thrive as ‘The Future Citizens’ of a connected world. The authors of the three Secondary School syllabuses emphasise three primary criteria of education. 1- It should evaluate and respond to the learning needs of students. 2- It should provide a safe environment for enquiry and discovery, and 3- it should enable learners' acquisition of autonomy and responsibility for their learning process. In other words, the authors encourage a gradual but necessary move toward a Learner-Centred Approach to EFL learning but do not include a methodology strictly speaking. What they emphasise however, is a set of working goals that the practitioner of education should keep at the forefront of their priorities. Gasmi [L1] (2020) translates them as follows

- Provide the learners with the necessary linguistic tools (grammar, vocabulary, syntax, and pronunciation) which allow them to follow with successful studies in English at university or in a professional milieu.

- Allow the learners to understand the English language and use it in different communicative situations.

- Develop learners' intellectual and mental abilities like analysis, synthesis, and evaluation through a series of exercises.

- Promote learners' strategies of learning, and of self-evaluation to enable them to expand and deepen their knowledge.

- Learn the rational use of oral and written texts in English in order to prepare the learners for their future professional lives.

(Ministry of Algerian Education, 2006, cited in Gasmi, 2020)

To ensure an authentic learning experience for EFL learners, teachers adapt their roles to fit the new paradigms that encourage discovery learning. As the target language should be experienced by the learners themselves, the teacher, then, endorses the role of the supportive entity guiding learners' progression (Widdowson, 1990, p. 188.) This, eventually influences the nature and shape of interaction between the students and teachers. However, T/S interaction remains the medium through which learners are offered mediation and guidance through learning situations, as well as support in learning difficulties.

The Teaching approach, on which the English syllabus is based, is a combination of principles from three learning approaches 1- the Competency-based approach, 2- the learner-centred approach, and 3- the project-based approach to language learning.

## **B. Theoretical Background of the syllabus**

From the communicative approach to ELT spring, a number of approaches stress the need for meaning in language learning. Three of these approaches to second/ foreign language teaching reflect an interest in meaning to different degrees the oral-situational approach, the notional-functional approach and the task-based approach.

### **B.1. Purpose of the Communicative Language Teaching**

The sole purpose of Communicative language teaching is to develop the ability of learners to use language in real situations, as language is bound to context. The goal has not changed much from earlier methods of teaching, such as the audio-lingual method which aimed at helping learners become proficient communicators in foreign languages. However, a major difference is noticeable between the two approaches to language teaching. While the audio-

lingual method has a structural language theory at its base, which views language as a set of linguistic, phonological, lexical, and grammatical structures (Rod, 2003, p. 27) Communicative language teaching draws its principles from Halliday's functional grammar. Halliday's model of language views language as highly purposeful, and that it is constructed on a number of functions necessary for communication. The difference in purpose is then what differentiates a method from another, for being able to use language structures correctly does not guarantee the ability to communicate efficiently. (Widdowson, 1978) To be efficient means to be meaningful, therefore meaningful use of language in context is what supporters of communicative language teaching try to achieve.

## **B.2. Communicative Language Teaching**

Communicative approaches to English Language Teaching have recognised communication in the classroom as an essential aspect of language teaching.(Littlewood, 1996),(Johnson, Christopher, 1979), (George, Widdowson, 1978) "...theorists and practitioners alike almost unanimously emphasise communication of one kind or another." (Kumaravadivelu, 1993). Different principles are identified to be part of Communicative Language Teaching (CLT).

David Nunan summarized the most important ones in a list of four principles

1. An emphasis on learning to communicate through interaction in the target language.
2. Introducing authentic texts into the learning situation.
3. The provision of opportunities for learners to focus, not only on language but also on the learning process itself.
4. An enhancement of the learner's own personal experiences as important contributing elements to classroom learning, as an attempt to link classroom language learning with language activities outside the classroom. (David, Hall, 1991)

Nunan's model shows that classroom interaction or communication is the major component of CLT, as it constitutes an important tool for learning communicative competence in the target language, even though communication has been defined differently by different scholars. It is, according to Aubrey Fisher, the "establishment of a social unit from individuals by the use of language or signs"(Fisher, B. 1978, P.8). For Harré and Lamb, it is the overall system of relationships people develop between each other and with the community and habitat

in which they live" (Lamb, Harré, Roger, 1983, p 104) Richards calls it "the exchange of ideas, information, etc. between two or more persons" ( Jack et al, 1986, p. 48 ). All these definitions allude to meaningful communication.

The aforementioned objectives are to be achieved through the mastery of English as a linguistic instrument for communication in spoken and written forms. "The ultimate objective of language learning is communicative competence, i.e. appropriate, meaningful, spontaneous, grammatically acceptable and reasonably fluent linguistic interchange, both orally and in writing" (Inspectorate of English, 1984 3) the desired outcomes of acquiring English as a second language has valuable advantages for the Algerian student. First, it secures access to the latest scientific, technological and cultural literature. Second, it offers students an open window into the academic and professional world. And finally, it develops intercultural competence and tolerance toward different cultures of the world.

### **B.3. Competency Based Approach to Language Teaching**

The competency-based approach to education is based on the principal theories of constructivism and social constructivism. It emphasizes meaning-making over memorizing, and applies social constructivist and pragmatic principles in language teaching/learning. Among the first researchers who advocated the role of social interaction in learners' development is Lev Vygotsky. He holds that Knowledge is not simply constructed, it is co-constructed. Vygotsky puts emphasis on the role of language and culture in children's cognitive development. In this respect, he developed the notion of a "zone of proximal development" (ZPD from now) according to which students learn more under adult guidance, or in collaboration with more knowledgeable others (MKO from now) to solve problems. Gordon, Mordechai (2009) described Vygotsky's concept of MKO as follows

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 with more capable peers. (Gordon, Mordechai, (2009) pp. 51-52)

The concept of ZPD helps shorten the distance between what learners already know, and what it might be possible for them to learn. It makes learning possible if learners are provided with help from people who already have access to that knowledge. The notion of a specific environment, where learning new things is possible emerges as a necessity. Human learning is therefore implanted in social and cultural context. Social actors, specificities of the context and cultural aspects do affect learners' cognition. The process of knowing is therefore shaped by interactions of learners with their surroundings (Kincheloe, Steinberg, Villaverde, 1999, p. 9)

An implication of this idea is that the nature of knowledge learned in different contexts is different each time. The ZDP proposed by Vygotsky does not only change the conception of learning acquisition, but also challenges the very nature of knowledge now brought closer to Dewey's idea of action, or process in which learners learn skills with the help of others, rather than memorise pieces of information given to them. The new understanding has had a significant impact on current teaching practices which are now informed by the constructivist paradigm. Constructivist instruction has been inspired by the ideas of procedural knowledge, and collaborative learning which have become the brand mark of constructivist classroom activities.

In addition to his concern with interactivity, Vygotsky also makes a clear connection between language learning, and meaning making. Mental schemes that are transmitted via language are essentially social phenomena that need to bear significance for the learner. He suggests that people learn by conveying meaning through authentic communication, and not just through attention to facts with no real appeal for learners. In his reflections about meaning, Vygotsky once said "I do not see the world simply in colour and shape but also as a world with sense and meaning. I do not merely see something round and black with two hands; I see a clock." (Semenovich, Vygotsky, Wollock, 1997, p. 39).

It is also our stance that one better learns things which are significant in their lives, and those which are useful for their social interactions. Following the competency-based approach, the task-based instruction adopts the constructivist view of language and learning, but with a strong inclination for on 'tasks'. A task is defined as "an activity in which meaning is primary; there is some sort of relationship to the real world; task completion has some priority; and the assessment of task performance is in terms of task outcome." (Skehan, Foster, 1997) cited in (Rod, 209). Lee goes further by providing the following explanations

A task is (1) a classroom activity or exercise that has (a) an objective attainable only by the interaction among participants, (b) a mechanism for structuring and sequencing interaction and (c) a focus on meaning exchanges; (2) a language learning endeavour that requires to comprehend, manipulate and/or produce the target language as they perform some set of work plans. (Lee, 2000, p. 32)

Learners learn best when they engage in activities that have interactional authenticity (Bachman, 1990) Authenticity refers to the use of authentic language for communicative purposes, as it happens naturally outside the classroom. Various learning models are designed to support this view. For instance, Krashen affirms that learners will acquire language when

they are exposed to ‘comprehensible input’ (Krashen, 1981). This model is inspired by the way children learn their first language, and emphasizes the need for motivation in the learning process. Krashen argues that L2 is learned through natural conversation and, the real context where meaning negotiation occurs (Long, 1996). The value of task-based teaching is best shown in its ability to provide opportunities for learners to ‘focus-on-form’ in the context of communication (Long, 1998). In contrast, Ellis suggests that the ideal condition for language acquisition is for it to occur implicitly through the acquisition of procedural knowledge (Ellis, 2003). Researchers agree that the two basic elements for developing learners’ communicative competence are a meaningful context, and active interaction with instructors and peers in the target language class (Ladjali, 2011).

Howatt considers that Task-based teaching constitutes a “strong communicative approach” (Howatt, 1984), this is because it aims not just to teach communication as an object (as is the case in the notional-functional approach) but to engage learners in authentic acts of communication in the classroom. Resnick and Klopfer mention a strong incentive of constructivist instruction First, the constructivist learning environment provides a wide range of learning opportunities, for the enhancement of collaborative/cooperative skills without hindering individual reflection (Resnick, Klopfer, 1989).

Another feature of the constructivist learning environment is the ability for the teacher to engage learners’ different perceptual senses to accommodate to their different learning styles and creativity in the learning process. (Weisberg, 1988) cited in (Kraft, Sakofs , 1989). When functionalist theories of language are combined with social constructivist and constructionist principles in education, communicative approaches to language teaching/learning emerge. Within this framework, educators try to engage learners in authentic communication, critical thinking, and raise their awareness of their role in society. One way to do that is to bring interaction into the language classroom. Brown claims the prominence of interaction in language education by saying that “interaction is the heart of communication.” (Brown, 2001, p. 165) and it is now largely accepted that the development of communicative skills by language learners requires enormous amount of practice and interaction using the target language.

Competency Based Approach (CBA) stresses the process of learning over the outcome. The manner in which learning materials are presented and acquired in the classroom should be closer, if not similar to how language is used realistic situations outside. The competencies and abilities taught in class should be in line with what language users actually need for effective

communication, thus, it is important that learners act as language users in real communicative context. By facing the same difficulties they may encounter in real life, they acquire a certain number of skills to solve communication related problems (Bougandoura, 2012, p. 51).

By adopting principles from both approaches, the Algerian authorities aim at achieving a number of goals, which are clearly stated in the syllabus of English (2005). They can be summarized in the following the learner should be given the opportunity to be an active agent of modernity by being able to take part in all types of transactions and communicate effectively with the English-speaking world. The syllabus also aims at efficiently equipping the students with the necessary skills and capacities to live in a demanding society, and to be able to cope with the changing requirement of the work market. It is also hoped that they will gain awareness about their social and cultural environment and learn how to live through their relations smoothly, locally and internationally. Another goal consists in encouraging students' participation in communicative events and exchanging ideas about themselves and others. It is worth noting that these learning objectives tend toward a Learner-Centred Approach to EFL teaching, by enabling learners' agency in the classroom and emphasizing the of peer-interaction in a predominantly inductive-teaching environment, it is hoped that learners will adapt to a more self-learning and discovery style of language learning, in the hope that they will acquire necessary skills that will enable them a smooth transition to university studies after graduating high school.

In the practical part of this study, the researcher will start by analysing the nature of classroom interactions that are used more frequently in EFL classes, in an attempt to evaluate the degree to which the secondary education syllabus requirements are applied in a sample of secondary education establishments, and to examine the number of difficulties and obstacles that may emerge in actual EFL classroom experience.

The next section will discuss the question of meaning relative to language learning. The process of Meaning-making is studied in different research fields such as semantics, pragmatics, communication theories and semiotics. A link is drawn between all these fields to understand current stances that influence educational research on meaning, and meaning-making in education to invite researchers to review their visions about learning in general. We start by defining the two traditions of semiotics and semiology, the focus being on Peircean semiotics and the pragmatic nature of classroom inquiry, which is the basis of discovering new meanings in EFL classes.

## **2. The Science of Meaning What Semiotics Says about meaningful teaching**

### **2.1. Semiotics and Semiology**

The 20th century was also a period when Linguistics appeared as an independent scientific discipline initiated by De F. Saussure. Saussure's ideas on signs never exceed linguistic considerations. Thus, he devised a dyadic theory of signs that became known as "Semiology" while Peirce's triadic theory was named "semiotics". This difference in labels marks the ontological differences between the two trends of thought which both study signs, and processes of significance.

At the core of these theories, lies the assumption that all meanings are mediated. Signs only have meaning if they stand in relation to something else. (Merrell, 2001, p 28) Semiology concentrates on the role of signs in relation to social life, because Saussure considers language as a system of signs that is basically social. His model of the linguistic sign is essentially dyadic. It describes the sign as being composed of two elements of abstract nature. These are the signifier and the signified. The signifier or the acoustic image is what results in the mind when the hearer perceives a combination of speech units he or she is accustomed to. The Signified, (that, which is signified) is the concept triggered in the mind by the signifier. The sign is the whole that results in the mind from the association of the signifier and the signified.

Saussure also posits that the relation between the signifier and the signified is arbitrary. That is, there is no natural or logical association between the signifier and signified. The relationship is conventional, means that it is dependent on social and cultural conventions. The sign needs to combine with other signs to form complex meanings. In several contexts, the sign acquires meaning only by virtue of its difference from other signs. "The preconditions of signs are other signs, a sign system, a language to where it belongs." (Lotman, 2003, p. 79)

Saussure disregards the individual use of language "parole" and focuses on "langue as a complex system" which is the product of social convention. As Lotman points out, for Saussure "there is no direct connection between the conceptual sphere and the voiced speech, between thought and acoustic matter; they are only related to each other indirectly" (Lotman, 2003, p. 80).

Later, this vision was changed by his follower Roland Barthes. Barthes inverted the relation of inclusion between semiology and linguistics to give more importance to linguistics, and the study of the social and cultural dimensions of texts. This inversion means that Semiologists diverted from Saussure's vision, into another that considers every system of signs as a closed language system, where signs have only meaning inside that specific system.

Therefore, Semiotics and Semiology follow separate ways as one tends toward generality and openness, and the other toward specificity and closed systems.

In contrast to the Saussurian dyadic model of signs, Charles Sanders Peirce developed around the same period on the other side of the Atlantic, a theory of logic based on triadic relations commonly called semiotics. Peirce is considered as an important philosopher, scientist, logician and mathematician. He created an elaborate theory of signs that has been gaining prominence since the last century. (Brent, 1993; Nöth, 1995, Van Lier, 2004)

## 2.2. Triadic Semiotics Terminology

### A- The Phenomenological Categories

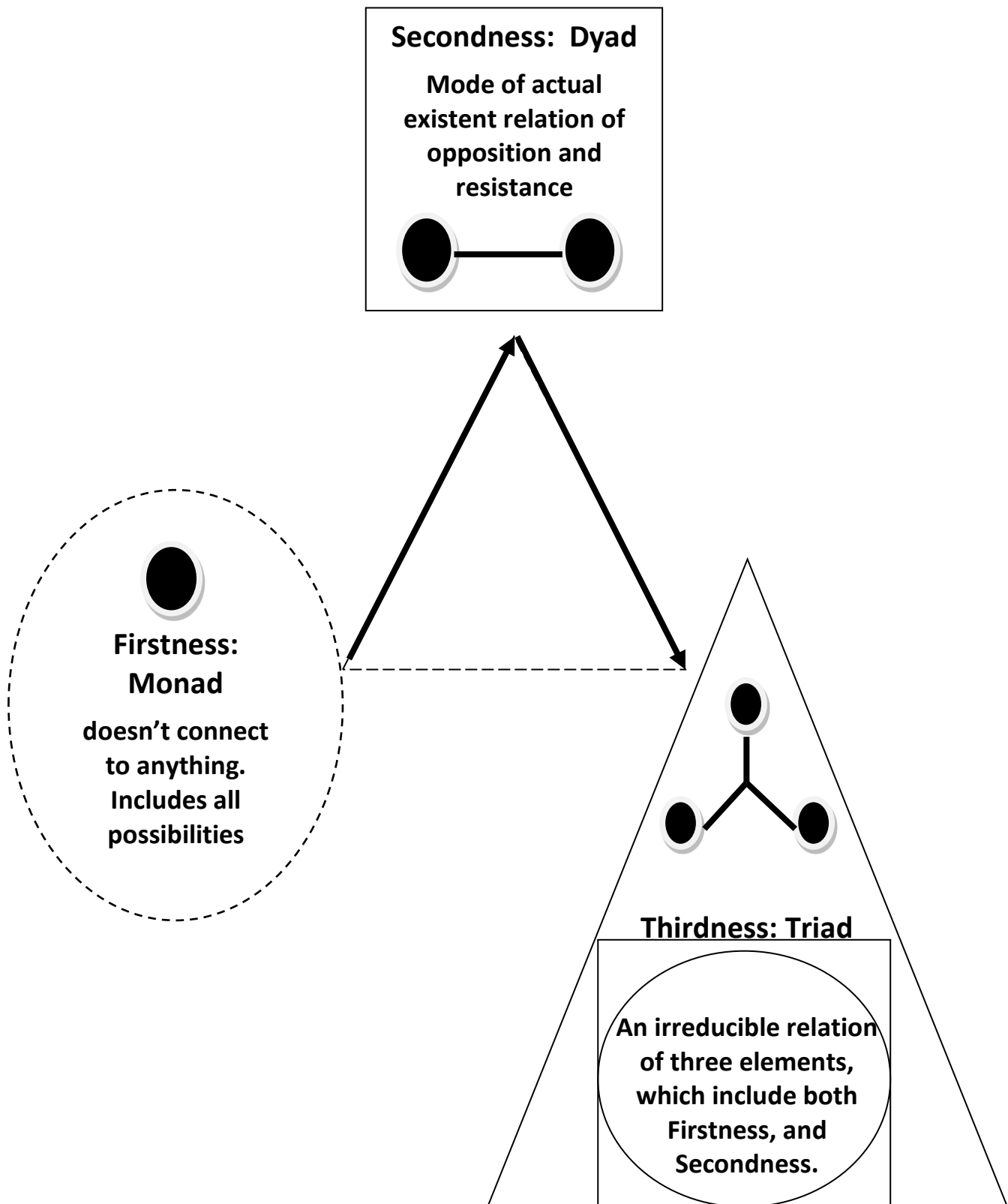
Peirce's philosophy is called phenomenology, which is a system of categories that can describe everything that can be experienced by the mind, or as described in Peirce's words "the collective total of all that is in any way or in any sense present to the mind ... ' (Peirce, 1931/1994, p.111). The three main types of categories can be distinguished, each corresponds, either to the experience of pure feeling, the experience of brute facts, or the experience of representations or signs, namely Firstness, Secondness and Thirdness.

The category which corresponds to pure feeling is labelled Firstness. As Peirce describes it, "Firstness is the mode of being of that which is such as it is, positively and without reference to anything else." (Peirce, 1931/1994, p. 205) Because it represents a pure feeling, Firstness cannot be explained or represented, as it refers to a potential before cognition. It can only be perceived before any attempt of understanding what it means. Peirce insists that "The idea of the absolutely first must be entirely separated from all conception of or reference to anything else..." (Peirce, 1974/1994, p. 139) In other words, Firstness represents pure possibility, because at the moment one is aware of a feeling, one doesn't know what causes it and what effect it may have. It is open to many possible explanations.

The category which represents brute force is Secondness. "Secondness is the mode of being of that which is such as it is, with respect to a second but regardless of any third." (Peirce 1974/1994, p. 1698) It refers to brute force because it entails a duality between two forces as each one exists only in opposition to the other, without intervention from a third. It may be experienced as resistance. Such as a door that is stuck and causing the opener to feel resistance to the force applied on the door, and this is before learning what causes the door to be stuck. It can be said that the 'precept', or whatever causes the senses to notice something, stays at the level of Secondness, before any judgement or relation is made to what it refers to or what its effect may be. The mode of being of secondness is thus actuality brute facts are not mere possibilities, they exist. Whatever caused them happened in the past, thus, they are actualised in here and now. "Thirdness is the mode of being of that which is such as it is, in bringing a

second and a third into relation to each other.” (Peirce, 1958/1994, p. 2667) Thirdness is a relation of mediation that binds between correlates by virtue of general law. The law of gravity for example, mediates between an object and the act of falling down. Thirdness cannot be a matter of possibility as it is not random, not that of actuality because it is not a single object or event that can be pinned down to one instance. Thirdness “The third Universe comprises everything whose being consists in active power to establish connections between different objects, especially between objects in different Universes” (Peirce 1935/1994, p. 2195). Thirdness is the category of natural laws and higher intellectual reasoning, such as inference and scientific enquiry. It is also the case of the “perceptual judgement as opposed to the percept. If the percept is something such as it is without relation to a significant or interpretant, in order to become intelligible, a percept needs an inference, a hypothesis about the content of the percept. To pass judgement, is to mediate between the percept and its meaning via some experience or general knowledge or some kind of law that dictates the relation of the percept to the world. This process is the act of representation or semiosis.

Figure 2 Peircean Philosophical Categories of Experience

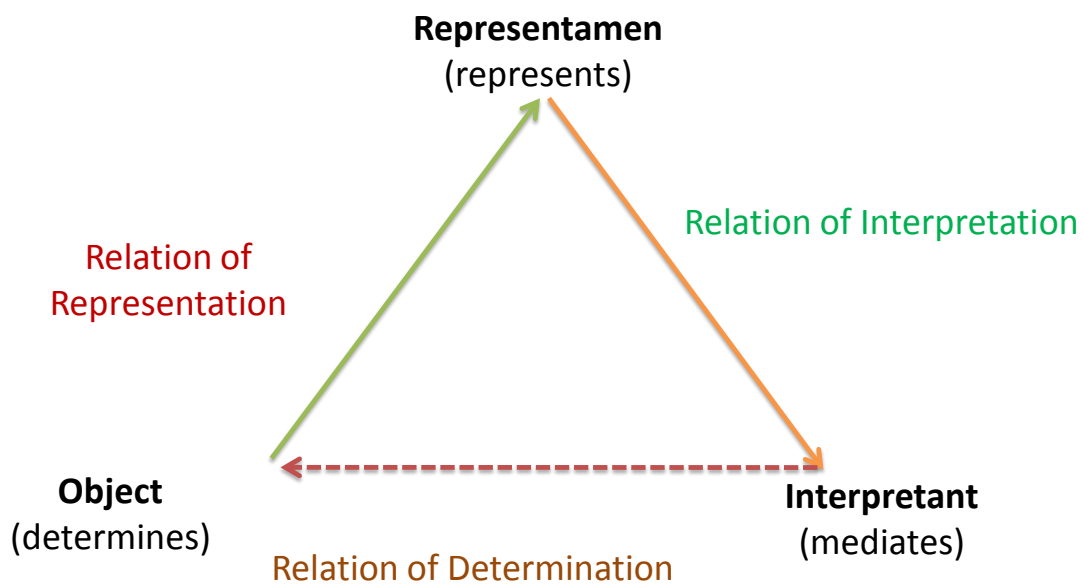


According to Peirce

A sign, or Representamen, is a First which stands in such a genuine triadic relation to a Second, called its Object, as to be capable of determining a Third, called its Interpretant, to assume the same triadic relation to its Object in which it stand itself to the same Object. (Peirce, 1932/1994, p. 377)

**Figure 3 Peircean Representation of the Triadic sign**

### The Triadic Relations Between the Components of the Peircean Sign



A sign is only a sign when it is interpreted. It has a part which represents something other than itself ‘ the representamen’ , a part which is represented or signified, that is, its ‘object’, and a part that signifies another sign which also refers to the same object, and can replace the representamen in the mind of the interpreter which is called the ‘interpretant’.

The object is what is represented by the sign. It can be immediate, such as whatever general characteristics gathered in the representamen, the combination of which is recognised as something, or it can be dynamic in case of what it signifies for a particular person according to their individual experience.

The concept of the interpretant is part of what makes the triadic model of semiotics specific and personal, as it accounts for the individual perspective. In addition to the process of interpretation, it makes explicit reference to the interpreter of the sign. “The interpreter of the sign addresses somebody, that is, it creates in the mind of that person an equivalent sign or

perhaps a more developed sign” Peirce (1958, p 363) Three types of interpretants may result from sign interpretation The immediate interpretant (when a sign is recognised as such without further explanation), the dynamic interpretant (when the object represented by the sign is recognised following previous experience,) and the final interpretant or the logical interpretant. This last interpretant corresponds to the signification any knowledgeable person may arrive at, since it makes the representamen correspond to the new sign given birth in the mind of any person used to establish such a relationship, whenever the same representamen is encountered. For example, the link between the law of gravity and objects falling on the ground. As a logician, Peirce was interested in the logical interpretant which can be a word, a proposition, a text or even an entire book.

All three interpretants are relevant in educational research. But most importantly reaching the final interpretant is at the heart of learning and competency acquisition. The classroom can be a space for scientific enquiry where the students and teacher form a scientific community which strives to reach common grounds, and learn new meanings by integrating new competencies. But most importantly, both teachers and students try to discover how the target language functions in the real world, and on what pragmatic rules it is built. Reaching the general rules that govern language is equivalent to seeking final interpretants, or logical interpretants which are not what one single individual thinks, but what a community of researchers agree upon by ways of scientific enquiry.

As an example of the action of signs (Semiosis) Icons are considered to be carriers of meaning by virtue of resemblance. Icones are signs that resemble the objects they represent, indexes have a physical or causal relationship with what they denote, while symbols have merely an arbitrary relation to their object. Every type of sign has a role in the process of cognition and recognition, thus, influencing the learning activity. Knowing to what type of signs learners are mostly confronted with in language classes may help teachers identify difficulties and opportunities for better instruction. By stirring up a number of questions about the nature of education, all the previously mentioned theoretical views inspired by a semiotic logic may help make clearer the processes of learning and teaching.

B- Types of Reasoning Deduction, Induction, Abduction

Scientific inquiry as viewed by Peirce (1932) is based on three types of reasoning which are illustrated in the following syllogism

DEDUCTION.

Rule.--All the beans from this bag are white.

Case.--These beans are from this bag.

Result.--These beans are white.

INDUCTION.

Case.--These beans are from this bag.

Result.--These beans are white.

Rule.--All the beans from this bag are white

HYPOTHESIS.

Rule.--All the beans from this bag are white.

Result.--These beans are white.

Case.--These beans are from this bag.

(Peirce, 1932/1994, p. 544)

In other words, when we take

- (1). All the beans in this bag are white. "as a Rule"
- (2). These beans are from this bag. "as an Explanation"
- (3). These beans are white. "as an Observation"

The deduction allows us to predict the colour of the next handful of beans drawn from the bag. Deductive reasoning derives observation (3) from the rule (1) and the explanation (2) which are taken as the premises. In deduction, a conclusion about a particular is drawn based on the general. If instead, the inference one wants to make is about the entire bag of beans, inductive reasoning can be used. Inductive reasoning moves from the particular to the general. It infers the rule (1) by combining the observation (3) and the explanation (2). Such observations are generally incomplete. Establishing a general rule from observations of a number of particulars leads to a logical problem. Rules do not always follow from repeated similar observations. This is the problem of induction which stipulates that when repeated observations of the same phenomenon are gathered and many explanations of these data are possible, induction does not provide the means from which to choose the correct one. (Ketokivi & Mantere, 2010)

Peirce (1932) provides a third variant of reasoning used in scientific inquiry which is abduction. Abduction is an inference to an explanation. If the task is to find from which bag a handful of white beans are taken while it is uncertain what colour the beans in the bag are,

abductive reasoning may provide an explanation, or a hypothesis that points to a certain bag of beans.

In abduction, the observation (3), and a general rule (1) are combined to find the explanation (2). The observations are evaluated in relation to a rule (or rules) to infer an explanation of how the observation relates to the rule. Knowing that the observed beans are white, and the general rule that all the beans in the bag are white, the reasonable explanation to infer is that the beans came from a specific bag that contains only white beans. This explanation can be understood as a hypothesis that can eventually be tested and verified. At first, the observation can look surprising providing that there are no ready explanations beforehand. However, the knowledge of some general rules in relation to the observations can provide enough material to infer explanations, and choose the most likely hypothesis that makes the enquiry scientific. (Mantere & Ketokivi, 2013) In summary, predictions and confirmations are made through deductive reasoning, because deduction is an inference to a particular observation, while generalizations are made through inductive reasoning because induction is an inference to a generalization. As for theorizing and hypothesising, they are made through abductive reasoning, as abduction is an inference to an explanation.

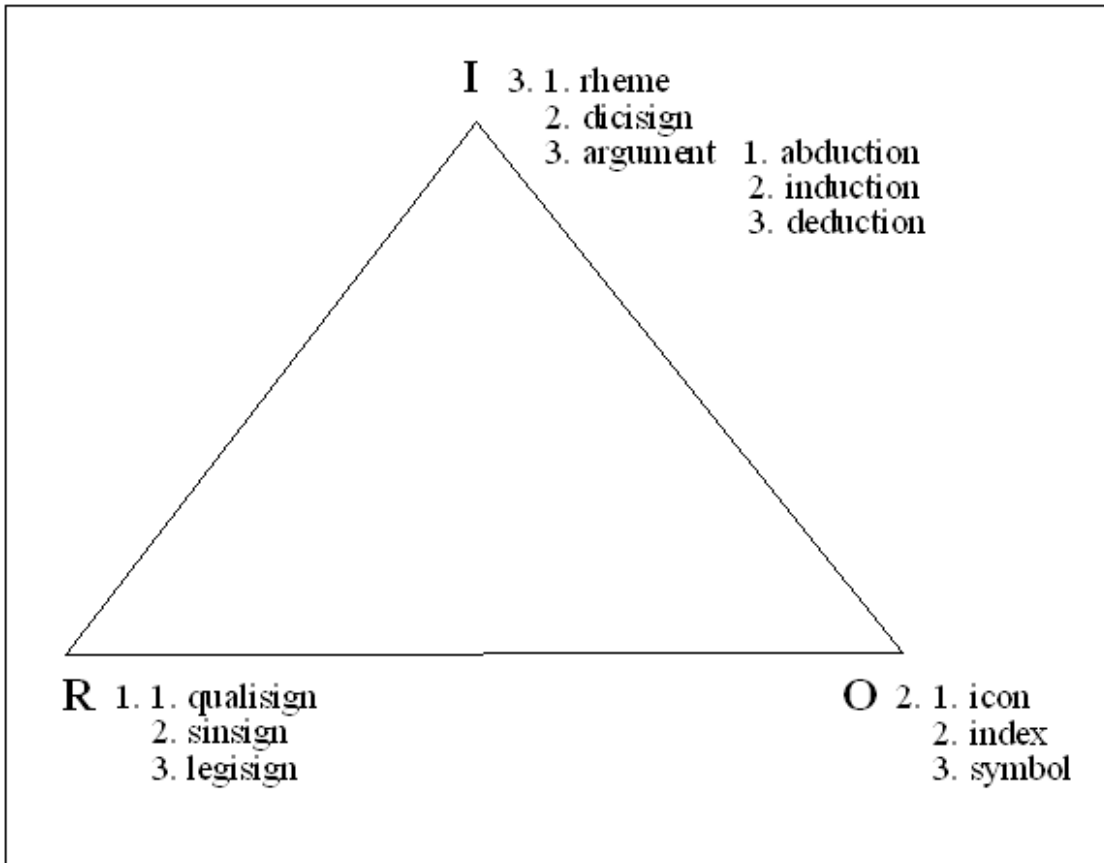
#### B.1. Infinite semiosis and fixation of belief

Everaert-Desmedt (2011) explains how habit short-cuts the infinite semiosis of signs

“The process of semiosis is theoretically unlimited. However, it is limited in practice, being short-circuited by force of habit, which Peirce calls the final logical interpretant - our habit of attributing a certain signification to a certain sign in a certain context with which we are familiar. Force of habit temporarily freezes the infinite recursivity of one sign to other signs, which allows interlocutors to quickly reach consensus on reality in a given communication context. But habit is formed by the effect of previous signs. Signs are the catalysts that cause habits to be reinforced or changed.” Nicole Everaert-Desmedt

The author provides the following diagram to represent the triadic relations between the sign's components

Figure 4 Triadic Relations and the Three Modes of Inference



The diagram shows that just as there are three types of signs and three types of grounds (sign-object relations) there are also three types of interpretants which correspond to three modes of reasoning that generate them. In other words, a sign can be interpreted in different ways, according to the collateral experience of the individual who does the interpretation.

There are three ways different people with different degrees of familiarity with the sign/ representamen interpret or make sense of it, following three types of reasoning. The following examples explain three different ways to interpret the picture below

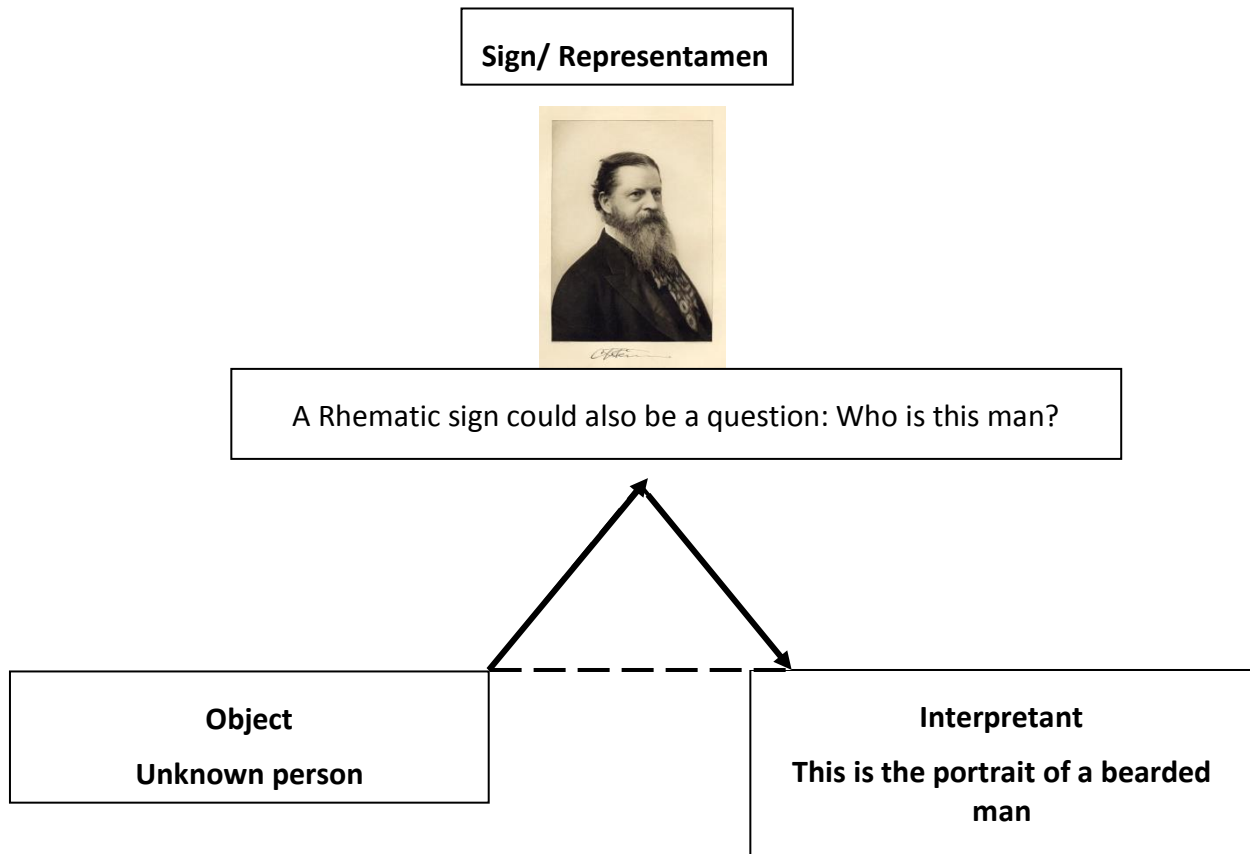


Figure 5 Photograph of Charles Sanders Peirce

**A- Rhem (Rhematic interpretant)** The interpretation of someone who does not have any information about the man in the picture.

For someone who does not know what Charles Sanders Peirce looked like, this icon (iconic sign), is a Rheme that accepts many possible answers, but none of them is certain.

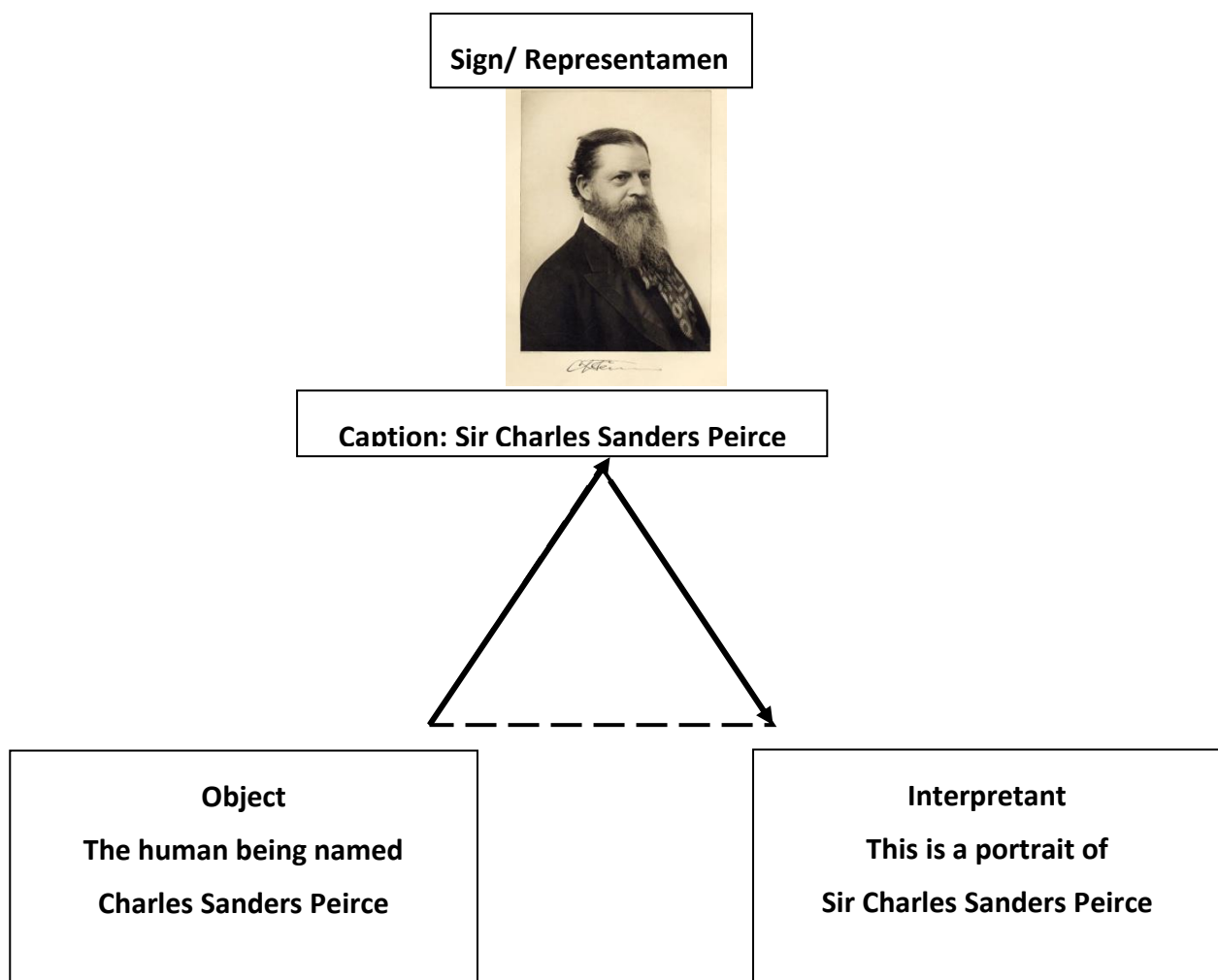
Figure 6 Schematic Representation of a Rhematic Iconic Interpretant



**B- Dicisign (Dicent Interpretant)**

For a person who does not know who Charles Peirce is, but finds this picture with the caption “Sir Charles Sanders Peirce” written underneath the picture, this icon, is an indexical sign as well, because it has a name that points at the owner of the picture. However, the person would not be able to say whether this is true or not. They do not have evidence or any more information about the identity of the man in the picture. All they know is his name, so they will need to conduct more research to learn about the identity, life and work of “Charles Sanders Peirce”.

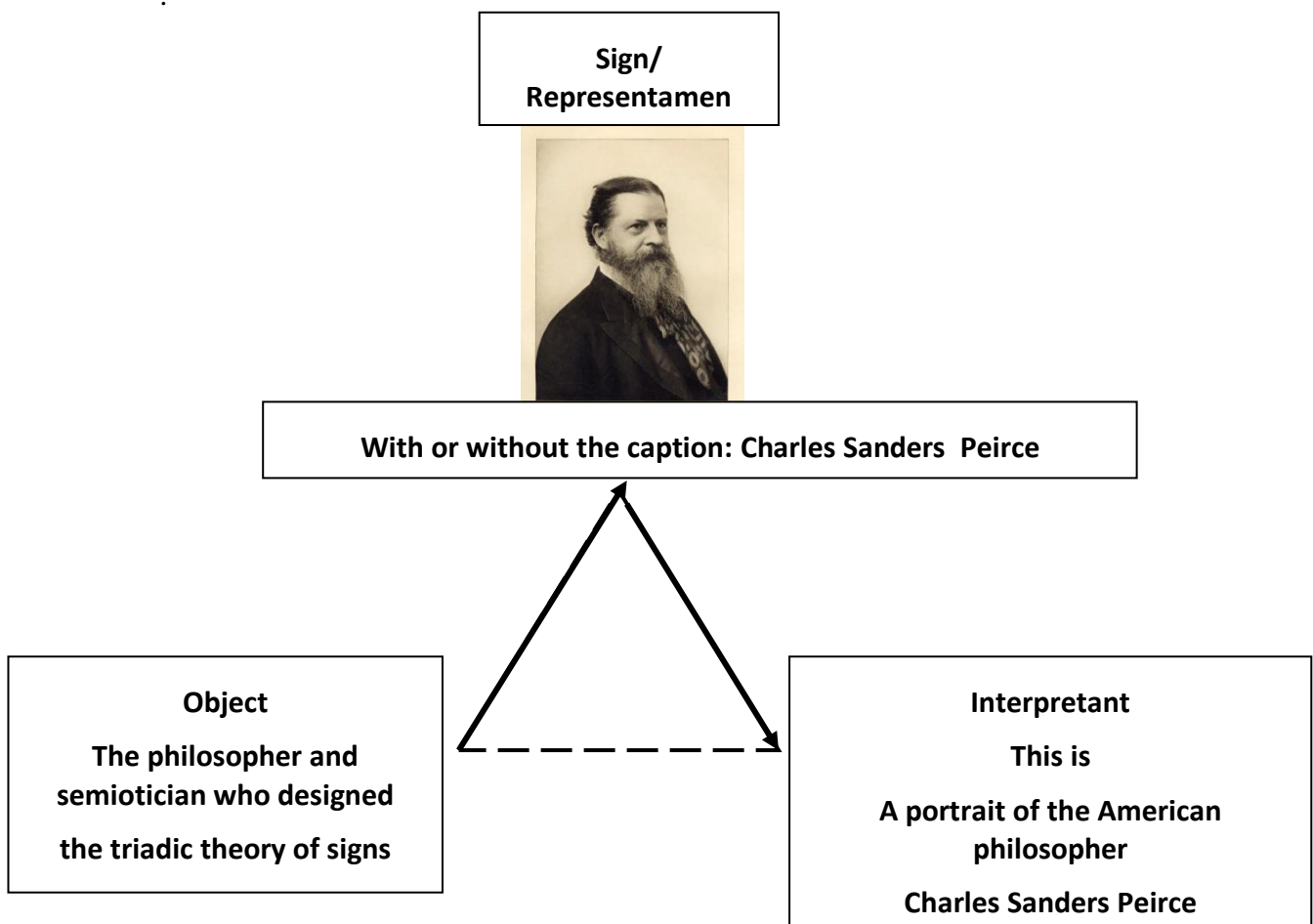
Figure 7 Schematic Representation of an Iconic Desisign Interpretant



**C- Argument (argumentative interpretant)**

For a person who knows Charles Peirce, and who has the habit of relating this picture to the older sir Charles Peirce, they know Peirce is, his job and his contributions. For one who knows Charles Peirce, this picture (the iconic sign) is also an index and a symbol. It is a portrait of a famous philosopher Mr Charles Peirce whose photo was taken sometime before his death in the 1914's

**Figure 8 Schematic Representation of an Argument**



The frame of the portrait and yellowing colour of the paper provides evidence that the icon is not an oil portrait for example, but a black and white photograph taken with an old camera during the 1800s, and it shows on the prominent and controversial logician, mathematician and pragmatist in the 19th century

The argument not only shows who the old photograph refers to, but also provides the reason for which this information is true. It provides clues and evidence of the time it was taken, but mostly it refers to the habit or the consensus about (the memory) of a researcher who was well known and shows the consensus of the people (historians) who attest to his work and influence.

Next time the person who discovers the portrait of Sir Charles Peirce for the first time, finds another picture of him, the person will develop the habit of relating the traits in the picture with the knowledge/memory of a well-studied semiotician.

### 3. Three modes of inference for three interpretants

In reference to the aforementioned example, the first case, abduction is the reasoning used to design hypothetical meaning for the Rhematic sign in the absence of any clues or indications. In the second case, induction is the reasoning used to gather all visible clues about the Indexical sign, and formulate a certain proposition from the gathered/ observed clues, but it still needs be confirmed. It is not guaranteed that the clues were interpreted correctly in the absence of a general rule or habit, or consensus that they point at what we think they do. In the third case, the reasoning is deductive. This means that the characteristics of the sign refer immediately in the mind of the interpreter, to a pre-existing set of habits, rules or certainties, which the sign comes to actualize. Thus, the sign becomes yet another irrefutable evidence for the rule/ knowledge the interpreter is familiar with.

### 3- The Three Trichotomies of Signs

When combined, the three types of the sign, the three types of (object-sign relation) and the three types of interpretants, these categories of signs produce three trichotomies of signs, and ten classes of signs

Table 1 Definition of Peicean Thrichotomies

**Table 1.** *Three trichotomies and three kinds of relation (see CP 2.243).*

	1st Trichotomy	2nd Trichotomy	3rd Trichotomy
Monadic relation	<b>QUALISIGN</b> in itself, the sign is of the nature of appearance.	<b>ICON</b> a sign which refers to the object merely by virtue of characters of its own (CP 2,247).	<b>RHEME</b> a sign which, for its Interpretant, is a Sign of possibility.
Dyadic relation	<b>SINSIGN</b> in itself, the sign is of the nature of an individual object or fact.	<b>INDEX</b> a sign which refers to the object by virtue of some existential relation.	<b>DICENT</b> a sign which, for its Interpretant, is a Sign of actual existence.
Triadic relation	<b>LEGISIGN</b> in itself, the sign is of the nature of a general type (CP 8,334).	<b>SYMBOL</b> a sign which refers to the object by virtue of some kind of convention.	<b>ARGUMENT</b> a sign which, for its Interpretant, is a Sign of iow (CP 2,252).

According to Peirce, Signs can be classified into three trichotomies according to how they are perceived and analysed. The first trichotomy considers the sign in itself, and has three states it can be a Qualisign (i.e. a quality or a feeling before it is incorporated or embodied in any existing thing or state.) For instance, a vague feeling of discomfort may indicate pain before its nature or its cause and consequences are even known to the one experiencing the feeling. It can be (a Sinsign) an actual existent which can be a singular object, or an event, something that already exists, and has a number of qualities but which has not been given any meaning yet. It can also be a Legisign, or a general law that dictates behaviours and processes such as a habit, a law, or a definition.

The second trichotomy consists in analysing the relation of the sign to its object. It considers if the sign has a relation of similarity in shape and characteristics with the thing it represents, (its object) then it is labelled an 'icon'. If the sign has some physical and or causal relation to its object and thus indicates, denotes or points at its object, then it is called an 'index'. If the sign has an arbitrary relation, be it cultural, or conditional, and relates to its object only in virtue of the social agreement, cultural norm, or law then it is a symbol, such as words, numbers and different concepts and theories, then it is labelled 'symbol'. The third trichotomy tackles the relation of a sign to an interpretant its meaning. If an Interpretant represents its sign as a sign of possibility, and has many different possible interpretations, then it's a Rheme. If the interpretant of a sign relates to an actual existent and single entity, then it is a Dicent Sign. A decent sign denotes its meaning by virtue of singularity and relates to it as a sign of fact. Lastly, if the interpretant denotes its sign as a sign of law or a sign of reason then, it is an Argument.

In other words, it can be said that a Rheme is a sign which is interpreted as representing its object only in its qualities; and that a Dicensign is a sign which is interpreted as representing its object in its actual existence as a singularity, and that an Argument is a Sign which is understood to represent its Object as being another Sign. (The argument provides the meaning/interpretant of a sign of law or habit, and thus actualising a general law. Or in other words, an argument is a token of a general type.)

Since the way a sign is perceived affects its nature, then, it is necessary to define what to perceive a signs. In Peircean terms, perception can be presented in the following equation  $\text{perception} = \text{perceptuum} + \text{perceptual judgement}$ . The perceptuum is the observable sign before it is interpreted, and the perceptual judgment is how an interpreter decides to mentally judge a sign. Individual differences may affect perception, as more or less information about the sign modifies how it is perceived. in the same way, as social and cultural filters allow for different interpretations of the same sign. For example, a proposition can be judged either as true or false, according to what it means in every context. However, an old painting of a portrait without a signature nor a caption can have many possible owners and painters, depending on whether the interpreter recognises the person which is represented in the painting or not. It is also possible for a professional in the art to speculate about the owner of the painting and its maker, depending on a number of clues deduced from the painting's style and historical facts.

**Table 2 Ten Classes of signs according to Peirce (1903)**

INTERPRETANT	OBJECT	SIGN-VEHICLE	EXAMPLES (from CP2.254—263 1903)
Rheme	Icon	Qualisign	“A feeling of red”
Rheme	Icon	Sinsign;	“An Individual Diagram”
Rheme	Index	Sinsign	“A spontaneous cry”
Dicent	Index	Sinsign	“A Weather Cock”
Rheme	Icon	Legisign	“A diagram [type]”
Rheme	Index	Legisign	“A demonstrative pronoun”
Dicent	Index	Legisign	“A street cry”
Rheme	Symbol	Legisign	“A common noun”
Dicent	Symbol	Legisign	“Ordinary proposition”
Delome	Symbol	Legisign	“An argument”

#### 4- The Learning Sign in the Educational Context

Teaching is a complex activity where teachers have to balance different tasks and roles, in order to help learners acquire competencies and skills within the restrictions of time and learning goals. Defining EFL teaching is not an easy task. Oukada (2014) offers a definition of teaching in terms of its goals and constraints. He says that the gap between the goals of teaching and achieving them is the numerous constraints of the practical classroom experience. Oukada describes four types of constraints that characterize the teaching profession: The epistemological constraint, the semiotic constraint, the learning constraint and the environmental constraint.

The semiotic constraint includes the dimension of teaching which deals with the different ways of communicating knowledge to learners. Oukada divides the semiotic constraint into two categories: The representation of knowledge, i.e. how teachers acquire and understand knowledge in both language and language learning, in addition to their perceptions about the theory and practice of teaching. In other words, representation is about how knowledge is represented in the mind of the teacher, with their unique individual differences and cognitive processes. It can be referred to as the teachers' competence.

The second category is the presentation of knowledge, which refers to the role of the teacher in presenting the knowledge to learners in ways which ensure an effective and meaningful classroom experience. This requires taking adequate decisions about what to learn and how to teach it, which includes lesson planning, deciding on learning goals, as well as classroom management and assessment. This category can be equated with the performance of the teacher as it focuses on what the teacher actively does rather than what he or she knows. That includes the ability to present concepts from the mind of the teacher in the form of words, tasks, and language materials. The problem with this dyadic representation of the semiotic constraint of teaching is that it does not provide insight into the learner's perspective. It does not show how the teachers' representations or the signs used to represent the teachers' conceptualizations of knowledge are received by learners, and whether the learners could make sense of the signs presented to them.

Another dyadic representation of the relation of EFL teaching methods with language acquisition is made by Erton (2006). Erton explores the semiotic nature of language teaching methods by using a multimodal theory and focuses on the semiotic signification of signs in a specific socio-cultural context. The author argues that each sign or symbol has a semantic and semiotic value which enhances its pedagogic value. Thus, by designing a classroom layout based on symbols, learners acquire their significance and their cultural value simultaneously. However, the efficiency of these methods in facilitating the learner's inference is not discussed. The study addresses the question of how students learn to make the necessary connections between the linguistic signs, and the objects they represent to establish their meaning. It is unknown whether learners fully grasp the potential and meaning of the signs presented to them by the teacher, and whether they can see the bigger picture of their use in class or not.

Reviewing these studies reveals that, both of them examine a dyadic relation between two correlates. For instance, Oukada (2014) describes the relation of teachers with the act of teaching, while Erton (2006) explores the relation of language with culture to study the cultural dimension of EFL teaching. However, for a deeper understanding of meaning-making phenomena in EFL classes, more than two correlates need to be studied simultaneously.

According to Vygotsky (1987) signs and artefacts mediate between knowledge and knowledge acquisition. By carefully designing and communicating meaningful signs, the teacher mediates between the learners, and their ability to develop competencies. Striving to assign meaning to signs, and finding their significance in the context of their production is

inherent to the learner's cognitive processes, thus making it the basic aspect of learning. However, Vygotsky believes that while these cognitive processes are specific to individuals, the process of learning is social in nature, as it involves peers and teachers who influence and guide learners' internalization of knowledge. Both the individual and the social dimensions of the teaching/ learning dynamic ought to be explored simultaneously. Moreover, Peirce explains that some signs (interpretants) act as mediators between other signs, (representamen) and the objects of their significance. Thus, what is missing from the aforementioned works, is a detailed observation of the dynamics of interaction between teacher, student, and meaning-making processes.

Thus, the literature review suggests that another dimension of teaching necessitates our attention. Any research effort should include the learner, who is at the receiving end of the teaching, and an active agent of learning. But, doing so inevitably brings questions about the learner's role in making meaning of language materials and lesson procedures which are provided by teachers in EFL classes. Following Oukada's concept of teaching constrains, a third category should be added to the dyadic distinction between presentation and representation, and that is the interpretation of knowledge. In this category, the learner's ability to observe the signs used in classes and make the necessary links between what is said and what is meant through logical inference is what learners do when they interpret signs and generate new meanings or 'interpretants' in Peirce's (1974) terminology.

Other researchers (Dewey. 1938, Semetsly, 2003, Radford. 2008, Wojcikiewicz, 2010, Priss, 2014) explore the role of semiotic traditions in educational research, and call for a pragmatic analysis of educational practices. Based on the theories of semiotics and Peircean pragmatism, the domain of Edusemiotics is concerned with the questions of meaning in learning, and examines what makes learning meaningful. According to Dewey, (1938) the focus of educational research needs to shift from the questions of "what?" and "how?" of teaching, which in his opinion correspond to questions about knowledge or the content of syllabi and lesson plans, and questions about the procedures and methods of teaching respectively, to the question of "why?" which includes asking about the reasons for choosing the said materials and methods and the meanings of these choices in the classroom experience. Wojcikiewicz (2010) says that Dewey's concern with the question of 'why' shows that he views meaning-making as the outcome of the learning process, rather than the mechanical stocking of knowledge and applying procedures, and thus it should be the object of educational

research. Wojcikiewicz relates Dewey's three perspectives about learning to Peirce's philosophical categories.

Peirce's philosophical categories of Firstness, Secondness and Thirdness are elements of the Peircean semiotic tradition. They are also called 'the phaneroscopic categories' because they are part of the science of 'phaneroscopy' which is the study of 'phanerons'. Phaneroscopy is developed by Peirce as a phenomenological classification system of all human experiences. Peirce defines Phanerons as the sum total of all possible elements included in the 'semiosphere' of a person. These consist in perceptions, sensations, feelings, thoughts, experiences, meanings, and all that the mind can conceive of. Phanerons according to Peirce, include but are not restricted to 'real' physical objects present in the objective experience of a person, but also include anything that constructs the subjective reality of individuals. Firstness is the category of possibility and monads, secondness is the category of actuality and dyads, and thirdness is the category of necessity and triads. These categories are detailed in the literature review chapter. Dewey suggests that learning and education can be experienced in three distinct ways, which are related to the aforementioned categories. Firstness, the category of raw emotions and infinite possibilities is equated with learning the "what" or memorizing facts in isolation from other considerations. Secondness refers to a state of opposition and duality where something is defined only in opposition to something else without reference to a third. It corresponds to learning the "how" or the act of meticulously learning methods and procedures and mindlessly applying them without reference to context. Thirdness represents the dimension of thinking and interpretation and meaning. It comprises both of the previous categories without being restricted to either of them.

#### 5.1- Peirce's Pragmatic Maxim

For Peirce, education as an intellectual process has to follow a logical method, one which ensures clarity of ideas and purposeful action. This method is the scientific inquiry which is based on the principles of pragmatism. In brief, Peirce (1934/1994), speaks of the perspective through which learners and educators seek practical outcomes rather than vague theoretical definitions. This pragmatic maxim or pragmatic principle in Peirce's words

Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object (Peirce, 1974/1994, p. 1670).

In other words, to evaluate the quality of instruction one must look at the language learners' performance and acquired competencies and encourage inquiry.

In the opinion of Wojcikiewicz, Thirdness corresponds to all three questions of what, how, and, why in the educational context. It represents purpose, and refers to the act of mediation between concepts and establishing relations, which is at the centre of what makes the learning experience 'educational' in Dewey's education theory. The concept of 'educational experience' refers to when all three aspects of learning are respected. In Dewey's opinion, the combination of the three states of learning is what makes it meaningful for both teachers and learners. The emphasis on meaning in education is shared by many tenants of the edusemiotics paradigm in educational research. Semestsky (2003) explores the philosophy of learning and psycho-pedagogy from the semiotic lens. Radford (2008, 2013, 2016) focuses on the semiotics of mathematics education, while Priss (2014) bases her argument on Peirce's pragmatism, and calls for a pragmatist theory of learning in place of the constructivist paradigm. This dissertation follows the edusemiotics tradition as it strives to shed light on the semiotics of meaning-making during classroom interactions. It is mainly concerned with meaning-making as a joint activity between learner and teacher, and endeavours to determine in what ways teachers influence their students' inference, and how this influence impacts their learning, but also why is T/S interaction the locus of meaning generation in EFL classes.

## **5- Edusemiotics a Theory for Meaningful Learning**

### **5.1- Semiotics for a Different Approach to Learning and Teaching**

Learning, knowledge acquisition, and discovery, although considerably different at some point, are all similar terms, in so far as their function in People's individual life is concerned. Anyone who is engaged in one of these processes has the same objective that of reaching some kind of meaning. Marzano states the importance of what students already know, their background knowledge, in learning new information. Acquisition of new knowledge only leads to learning when it entails affirmation or disregarding of previous knowledge, leading towards new meaning. Humans learn, create, and use signs in every aspect of their lives. (Marzano, 2004)

Semiotics is the discipline that studies signs and their action in different domains.

Semiotics deals with a large body of signs, and is, also, a methodological tool to account for all the phenomena that deal with or relate to the use of signs by living creatures, humans included. (Danesi, 2010) From the beginning of the modern era of semiotic studies in the middle of the twentieth century, different semioticians incorporated semiotic principles in other domains such as biology, anthropology and media literacy which led to the emergence of different disciplines of semiotics. Danesi 2010

The discipline of edusemiotics as coined by Danesi in Semetsky (2010) has its roots in Vygotsky's sharp remarks about the role of signs and sign theory in learning and education. However, incorporating semiotics into the domain of education came rather late in the evolution of semiotics disciplines. (Danesi in Semetsky 2010 and Olteanu 2014) Although, the idea of linking learning theory with sign theory sprang earlier in the 1930s with Vygotsky's conviction that "human beings actively remember with the help of signs", educational semiotics or semiotics of education was yet a revolutionary idea for its time and it had to wait till the early decade of the twenty-first century to mature. (Vygotsky, 1878, p. 51) By introducing the concepts of semiotic mediation and multimodal learning in theories of child learning, Vygotsky provides evidence for sign interpretation as a catalyst for meaning generation in language classes (Wertsch, J. V. 1985, Ma, J. 2014).

## **5.2- Edusemiotics a Semiotic Approach to Language Learning**

### **5.2.1- Defining the Semiotics of Education**

Edusemiotics is another branch of semiotics which is at the threshold between theoretical logic, the theory of education and the philosophy of language. The term "edusemiotics" as a diminutive for "educational semiotics" or "the semiotics of education", was first coined by Danesi, who explains that "semiotics is an ideal tool for conducting research in various domains, and especially in the domain dealing with how signs are learned." (Danesi, 2010, p. 1) In the same vein, Radford (2013) asserts that

"In the same way as Biosemiotics is biology interpreted as sign systems study, Edusemiotics is the branch of semiotics that studies sign and sign interpretation in the education context on the one hand, and which looks at education as manipulation of signs on another hand. Yet, just as Biosemiotics is not a simple mixture of theories in biology with the theory of semiotics so, Educational semiotics is not 'an amalgamation' of independent Semiotic properties with educational principles. It is rather "an educational approach that draws from semiotics." (Radford, 2013, p. 1)

Radford states clearly that semiotics, a doctrine of signs and meaning is not directly applicable to education. But, exceptional insights can be drawn from semiotic principles and can be used to build a different approach to education. It is believed that, an approach informed

by a semiotic vision of the world may accomplish better results than others, and those efforts, should be made to incorporate the semiotic vision into the existing framework of educational practices. (Radford, 2008)

Radford goes on to argue that the manner in which semiotics can contribute to education is “mediated by the epistemological assumptions that underpin educational theories and the extent to which those assumptions can be cast in, and even be transformed by, semiotic concepts and constructs.” (Radford, 2013, p. 1) this means that for a new approach to education to appear on the basis of semiotic principles, a new perspective is needed to guide theorists and practitioners. Semiotic theories offer a different look at the world in its entirety and suggest a completely new look at education and its objectives, “because semiotics focuses on sign and signification and the educational focus on knowing in particular contexts (e.g., classrooms, workplaces.) A semiotic approach rests unavoidably on assumptions that are made about the epistemic role of signs” (Radford, 2013, p. 2)

### **5.3- Principles of Edusemiotics**

Semiotics is the science that deals with signs. It is the “discipline of signs” par excellence. Therefore, it can function as a theoretical background explaining the actions of signs and humans’ use of them. Educational semiotics uses "sign" as a unit of analysis, and emphasises the role of practical experience, sign interpretation and logical enquiry. (Stables, 2015) Danesi (2010) stipulates that “semiotics is an ideal tool for conducting research in various domains, and especially in the domain dealing with how signs are learned.” (p 1) From this perspective, education is seen as an activity of sign learning. This is why the ability of semiotics to study signs, their behaviour, creation and functions makes of it an interesting investigation tool for educational research.

Educational Semiotics or simply (edusemiotics) is a branch of semiotics. The idea of developing an independent education philosophy started only a few years ago and was brought to maturation with the efforts of Semetsky and Stables. It constitutes a new approach to education on the basis of theoretical semiotics (Semetsky, 2010). Theoretical semiotics offers a different look at the world in its entirety and suggests a completely new look at education and its objectives. “A semiotic approach (to education) rests unavoidably [...] on the epistemic role of signs” (Radford, 2013, p. 2) and upon eight major principles

1. Learning is meaning-making
2. Meaning-making is an interpretation of signs
3. Interpretation of signs is semiosis

4. Semiosis is the action of signs the relations between the representamen, the object, and the interpretant
5. Interpretation of a sign is another sign more elaborate than the first Semiosis is infinite
6. Learning is the discovery of similarities and other sign relations
7. Learning is the act of experiencing and acting on improving one's competencies.
8. Learning is shared between teacher and student and the environment

Educational semiotics uses signs as a unit of analysis, and strives to explain educational phenomena in terms of signs. It stresses the role of practical experience, sign interpretation and logical enquiry within educational contexts. In other words, edusemiotics studies the production and interpretation of signs in educational situations. This is why it is so intimately related to the field of Semiotics.

The relation between semiotics and learning lies in deep epistemological considerations. In the light of sign theories, learning in its essence is condensed into the act of learning signs and teaching the mission of instructing learners how to create, use and interpret signs. Edusemiotics draws on the intellectual legacy of the semiotician Charles Sanders Peirce, especially his conception of signs and meaning. Educational semiotics is based on two basic principles Learning is sign interpretation, and Teaching is learning. In the same line of thought, Zellmer (1979) writes that "pedagogy is guidance to semiosis" (pp. 18, 43) in other words, making interpretations of signs is what knowledge construction is about. Not only is that, but the act of developing a skill or acquiring a habit is in fact the act of producing an interpretant at the conclusion of the learners' semiosis. In his article 'learning as falling in love learning as the passage from Icon to Argument or why do students have teachers' Olteanu (2014) treats the relation of Peirce's semiotics to education. He declares that authentic learning depends on the freedom of thought. In his words, Peirce insists on the fact that education is a sheer act of discovery. The purpose of a semiotic approach to education is thus, to offer, at least three potential services. Firstly, it can help explain how local and foreign cultural elements can be used as semiotic resources for teaching English as a foreign language. Secondly, in diagnosing present problems of education, foresee future difficulties and provide solutions. Thirdly, enhance critical thinking abilities and heighten research skills, as both processes and aims, of learning (Olteanu, 2014a).

### **A- Learning as sign interpretation**

Broadly speaking Edusemiotics is understood as the examination of educational phenomena as signs and signs actions in the educational context. In other words “semiosis” as sign actions exactly as it is conceptualised by Peirce

By semiosis I mean an action, an influence, which is, or involves, a cooperation of three subjects, such as a sign, its object and its interpretant, this tri- relative influence not being in any way resolvable into actions between pairs (Peirce, 1979, p.15).

Following Peirce, Deely stipulates that “at the heart of semiotics is the realization that the whole of human experience, without exception, is an interpretive structure mediated and sustained by signs” (Deely, 1990, p. 5). Education is then, thought of as part of human experience which in turn is mediated by signs.

Meaning making or learning, in this semiotic sense is sign interpretation or is an act of research and of inquiry. Peirce’s logical “theory of Inquiry” (CP, 2.755) relies on three basic modes of inferences serving research, the deductive, the inductive, and the abductive, or retroductive logic i.e. hypothesis formation. “These forms of inference constitute various forms of reasoning and could be considered the engine or driving force of semiosis.” (Smith, 1999, p 6) abduction which is one of the inference modes detailed by Peirce has an intrinsic role in enquiry and language learning. This relation to the semiosis of learning will be detailed further in the next section.

#### **Surprise and doubt as elements of thought and learning**

Basically, from Peirce’s semiotic viewpoint, motivation for making inferences, interpreting, or making meaning, is urged by the need to make sense of the events and things in context to remove doubt. The motivation to reduce or remove this doubt is the trigger for semiosis and for the resulting change in one's current beliefs, called the fixation of belief by Peirce.” (Smith, 1999 p 6) The same motivation animates the will to learn. The process of interpreting signs or the making of semiosis is also inherent to education and has pedagogical effects. For Cunningham (1987b) knowledge is “a process, not a static structure to be learned and remembered.” (p. 214) this means that learning is the way to knowledge, not the knowledge itself. The way for any kind of knowledge is paved by thinking modes that people

use to infer meaning from observable facts. Cunningham also proposes an integrative approach which emphasises the notion of interaction. He describes cognition as always involving “an interaction between the physical world and the cognizing organism,” (Cunningham, 1987, p. 196) In the same vein Zellmer (1979) identifies pedagogy as a “guidance to semiosis” (pp.18) and depicts three successive phases of learning following the process of semiosis in parallel to Peirce’s categories of firstness, secondness and thirdness. He equates learning separate constructs to firstness, learning organised structures to secondness and thinks of the acquisition of rules and laws of merging both constructs and structures as thirdness. (pp. 43) in this perspective, the progression of learning is interdependent with signs development or meaning generation (Semetsky, 2010)

The relation between all meaningful learning, semiotics and pragmatism is interactive learning (interaction). Because of the complexity of the learning phenomenon (i.e. being liked to think and meaning-making), a deeper analysis of learning in the process cannot deny the pragmatic and semiotic explanations. This is why the current of semiotic education draws its principles from pragmatic and semiotic stances. A few of these principles are explained below.

### **B- Teaching is learning**

The semiotic approach to education relates the act of teaching and learning not only as complementary activities but also as they are similar in nature. Both are based on meaning-making and sign interpretation. They are bound together as a phenomenon of interpretation. Learning in a semiotic logic is teaching, and both teaching and learning are termed “Learning”. The pedagogical implication of this principle is directly linked to the theoretical foundations of Edusemiotics. A semiotic approach to learning does not explain learners’ difficulties in learning as a cognitive or a psychological deficiency on the part of the learner, nor as originating from certain social disadvantages as stated in sociological theories. In fact, the idea of failure of learners is not even admitted in semiotics. The reason is that learning and teaching are seen as one and the same activity, yet the outcome of which, is never the same for the teacher and the learner. As explained by Olteanu (2014) “What is taught by the teacher never coincides perfectly with what is learned by the student.” (p.469) both the student and the teachers are involved in a continuous circle of interpretation of signs. In semiotic terms, the action of signs is called semiosis.

The product of an act of interpretation is always another sign. To understand a sign is to produce a new sign determined by it. And the first and the second signs are never identical. Only the element of similarity between the two signs indicates to the learning subject that he, or she, is in tune with the teaching subject. Teachers cannot control the process of inference in their students' minds, that is something particular to the student and presupposes that unless learners have the freedom to infer significance on their own using similarity of signs provided by teachers, they may not be able to reach (to infer) the exact same meaning intended by the teacher.

The principles of a semiotic approach to education are inscribed in pragmatic thought. As both teachers and students are involved in a common phenomenon of sign interpretation, they are both engaged in learning. Learning, which is identified as an infinite semiotic process is based on the interaction of knowing subjects with their environment and their active interpretation of signs from that environment. Knowing subjects discover similarities and make predictions, that is relating the known to the unknown. Such processes are simply discovery in action. However, when one embarks on a journey to discovery, one may not know in advance what will be discovered, therefore any restrictions, even temporal limitations, can alter the authenticity and truth of the inquiry. It is only in a free environment that genuine learning can take place. In a semiotic perspective, what is demanded from teachers then is not to guarantee results, but rather to “offer the learner the optimal experiences for learning.” (Olteanu, 2014, p. 469) This stance will be held all over our research as a basis for the exploration of the different practices teachers adopt in language classes to offer students opportunities to grow as language users and as individuals.

### 6- The Role of Classroom Interaction in Language Learning

In the 1980s, traditional ELT classroom interactions were considered as inferior to ‘natural’ interactions which were regarded as genuine (Seedhouse, 1996). This is mainly due to the development of the communicative approach in education. Yet in the 1990’s, classroom talk became recognised as another form of social discourse. Like any communication discourse, indeed, it was considered in its context as natural and genuine (Bernstein, 1990). Nunan (1987), for instance, studied a few lessons which were in concordance with all the communicative language teaching principles in vogue. He concluded that little difference was found in the patterns of interaction used in more traditional classes.

As Seedhouse (1996) explains, the linguistic forms that are used by learners during classroom interaction inevitably relate to the pedagogical purposes set by the teacher, regardless of the teaching methods that are used (Seedhouse, 1996, p. 24). Thus, the interaction

patterns that are produced by teachers and learners in classroom contexts fall in the category of institutional interaction. Drew and Heritage (1992) propose the following characterization of Institutional interaction Institutional interaction is usually goal oriented and ritual bound communication (i.e. communication is restricted to a certain degree to some forms or conventions.) This makes of it one of the purposeful collaborative joint activities.

1. Participants' contributions are often managed with special care to maximise efficiency in consideration of the constraints of the context, including time, task instructions, and participants turn taking... etc.)
2. Institutional talk may involve specific procedures and inferential frameworks specific to institutional contexts.

What distinguishes institutional discourse from other forms of social discourse is also what makes it interesting for educational research. That is, studying classroom interaction procedures and characteristics may explain how interactional features such as the Initiation, Response, and Feedback pattern i.e. (IRF cycle) help achieving institutional and educational goals. (Sinclair & Coulthard, 1975) Seedhouse (1996) isolates three main characteristics of ELT classroom interaction which may apply to all EFL classrooms

1. The linguistic forms and patterns of interaction which the learners produce are subject to evaluation by the teacher in some way.
2. Language is both the vehicle and object of instruction.
3. The linguistic forms and patterns of interaction that the learners produce will be linked in some way to the pedagogical purposes which the teacher introduces.

These universal characteristics may serve as a platform to the understanding of the discourse produced in the classroom and how they relate to meaning making at the micro level of interaction dynamics.

### **6.1- Defining Interaction in Learning Contexts**

Socio-constructivist learning designs interaction as an implicit process that is involved in nearly every step of students' thinking and which allows them to connect new knowledge to old information (Gavriel, Salomon & Perkins, 1998, p. 3). Mercer considers interaction as a basis for learning, because it enables learners to be socially creative in groups, or in face to face conversations. Understanding the process of learning concerning groups of individuals within specific social contexts is the focal point of the "guided construction of knowledge"

theory which depends on talk as social action and the relationship between context and continuity (Mercer, 1995).

Different definitions are given to the concept of interaction. For instance, Fogel (1993) describes it as an active sharing of information, meanings, opinions, interests, and feelings between addresser and addressee. Similarly, Stacey (2003) defines interaction as a collaborative effort to exchange verbal and nonverbal responses. Brown and Lee (1994), on their part, contend that interaction is the heart of communication, may be what all communication is about. Nöth (2014) defines classroom interaction as “a two-way process between the participants in the learning process”. This implies that there ought to be effective communication in the classroom where the teacher and the learners mutually influence each other.

## **6.2- The Different Lesson Stages**

As mentioned above, institutional interaction is subject to rituals and procedures that govern its shape and patterns. In his study on classroom discourse and interaction, Gourlay divides EFL classes into three distinct phases

- 1) ‘Instructions’ Teacher addresses whole class to instruct students to undertake an activity, or take part in group work.
- 2) ‘Checking answers’ Eliciting outcomes or opinions as the teacher addresses whole class to elicit answers, outcomes or opinions from students after individual work, group work or homework.
- 3) ‘Leading’ Teacher addresses whole class to introduce a new topic or focus.” Teacher-student Interactions are more likely to occur during the plenary activities (Gourlay, 2003, p. 190)

Usually, EFL classes can be divided into two main phases. The first one is the plenary phase. It is said to be chiefly teacher centred as teachers are in active interaction with learners, and sometimes take a larger share of talk time. The second important phase is that of group work in which learners are left to work individually, in pairs, or in groups.

In this study, the purpose of the researcher is to analyse the recorded lessons in terms of topic, goals, and procedure. The linguistic discourse produced by the members of the classroom will be weighed against the pedagogical context in which it is performed, to evaluate its contribution to the on-going institutional discourse and the purpose of each lesson. Interactive

activities from recorded interactions are analysed to clarify whether and how specific teachers' and students' interactions meet the goals of EFL classes.

### **6.3- Classroom Interaction Studies**

Whenever people act and interact with one another they communicate, and interact in different settings. And when that setting is the classroom, communication is called classroom interaction. (Nisa, 2015, P. 124) Classroom interaction analysis is an important area in applied linguistics. Researchers (Allen et al., 2011; Jones, Bub, & Raver, 2013; Pianta, 2016) emphasize the importance of peer interaction because interaction in EFL classes facilitates the learning process. However, little discussion is conducted about teacher-learner interaction which is too easily associated with traditional teaching, and thus, blamed for discarding meaningful communication. In order to understand "classroom interaction" it is worthy to define the term classroom first. Allwright and Bailey cite Gaies' definition of a classroom

The classroom is the crucible—the place where teachers and learners come together and language learning, we hope, happens. It happens, when it happens, as a result of the reactions among the elements that go into the crucible—the teachers and the learners'’. (Gaies, 1980).

In this place where three entities the teacher, the learner and the classroom environment are in constant interaction, a "continuous and ever changing process" takes place. (Sarosdy, et al, 2006, p 35). Contexts change continuously and teachers influence the learners and are influenced by them. (Mateja & Dagarin 2004, p 128).

This process of exchange between the teacher, the learner and the environment of the classroom brings into action numerous influencing factors The learner's previous experience, knowledge, cognitive and emotional heritage. Similarly, the teacher comes with his learning/teaching experience, and personal character. Both Teachers and students share the same classroom setting. Therefore, what happens in the classroom cannot be predicted accurately beforehand. The teacher's lesson plan for instance is subject to change when confronted with students' different backgrounds or unexpected event. "Chemistry of variables may come to light in the classroom setting, even the best laid-out lesson plans are subject to far reaching modifications as a result of the manifold existing challenges." (Djebbari, 2014)

It has been observed in traditional classrooms, that teachers talk much more than learners inside the classroom. Chaudron (1988) affirms that although the teachers ask a few

questions to learners and vice versa, most of the time, students are not given enough time to respond. The teacher is often in control of students' interactions as she/he starts and concludes the conversations. And often she/he takes almost two-thirds of classroom talk. This kind of interaction is proven inefficient when it comes to motivating students to interact. In order to foster learners' interactive communication, Harmer suggests that the teacher takes the role of the facilitator instead of controller in classroom communicative activities. (Harmer, 1991)

Robinson defines interaction as "the process referring to 'face-to-face' action. It can be either verbal, channelled through written or spoken words, or non-verbal, channelled through touch, proximity, eye-contact, facial expressions, gesturing, etc." (Heljä, 1994, p.7) Ellis adds that interactions are meaning-focused and purpose oriented i.e. the role of interactions is exchanging information and preventing communication breakdowns. (Ellis, 1990)

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Classroom interaction can be verbal and non-verbal. Non-verbal communication is achieved through behaviours and body gestures (e.g. Head nodding, hand rising, and eye contact...etc.) Verbal interactions manifest in oral and written forms. The most common one in formal education is the oral interaction which implies that students interact with others by speaking in class, answering and asking questions, making comments, and taking part in discussions. (Tuan, Nhu, 2010)

These two types of interaction are summarized by Malamah and Thomas who categorizes classroom interactions according to the one who initiates communication in the classroom. Sometimes the teacher addresses (a) one student, (b) members of a group, (c) to the whole class. Sometimes the student initiates the communication by speaking to the teacher, to another student, to group members, and to the whole class. (Malamah, Thomas, 2005, p. 59) Classroom interaction is further classified into learner-learner interaction and teacher-learner, which is one of ten principles of effective teaching (Thomas et al, 1993).

The central place of interaction in the classroom is due to its benefits for learning. Rivers mentions some in the following

Through interaction, students can increase their language store as they listen to or read authentic linguistic material, or even output of their fellow students in discussions, skits, joint problem-solving tasks, or dialogue journals. In interaction, students can use all they possess of the language – all they have learned or casually absorbed – in real life exchanges (Rivers, 1987)

Interacting in the target language in the classroom enables learners increase language store or acquire fundamental language structures, develop their communication skill, build self-confidence in speaking the language they learn, and finally strengthen their social relationship with teachers and peers as they exchange information and get feedback. (Naimat, 2011)

Various analytical models of classroom interaction discourse were implemented to facilitate classroom observation and analysis of classroom interactions. Conversation analysis is based on the premise that classroom interactions are “ordered, methodical, and systematically organised, rather than chaotic and disorderly” (Seedhouse, 2004, P. 2). This is why Sacks (1964) points at the fact that there is inherent order and structure to all classroom interactions, and that is what interaction studies need to discuss and improve.

Numerous studies have taken language classes as study ground for the analysis of classroom talk phenomena, for decades. The following is a list of classroom studies analysis methods. In the early 70's discourse analysis was the conventional language analysis and included a number of analytical models. For instance, the model of pedagogical functions created by Sinclair and Coulthard (1975), Flanders (1970, 1981) coded the eight basic functions of classroom utterances. Later, Guthrie (1984) adopted the constructivist alternative of classroom utterances analysis in the context of a small group of learners who interact among themselves and with the teacher to perform a set of tasks. This combination was later considered as “the process whereby lessons are accomplished” (Allwright, 1984, p.159).

Other researchers like, Gloria (2003) and Hedef (2010) use discourse analysis to analyse classroom talk in contrast to conversation analysis which focuses on one aspect of classroom talk, for example teacher talk, or students talk, therefore losing the elements of dynamics that characterise classroom interactions. Different classroom interaction typologies exist and could be classified according to their forms and their functions. As they are not in direct connection with our work, they will be cited briefly. See for example Ellis (1984), Tsui and Bik-may (1987) Seedhouse (1994). Other studies focused on the type of factors affecting classroom communication. It has been found that Classroom interactions are not only influenced by the

teacher's talk, but also by other factors such as classroom environment, social and cultural differences, and psychological factors have an impact on the nature and aims of classroom interactions. (Khelifi, 2014) Sociocultural and sociolinguistic perspectives to classroom instruction studies, suggest that the nature of classroom interaction mediates the values, knowledge and ways of thinking of the learning community. (Wray, 2002)

Therefore, the nature and patterns of the teacher-student interactions are not isolated from their socio-cultural context. A few categorisations take into account the factors that influence classroom interactions. According to Al-Seyabi (2002) classroom interactions are affected by student factors First, (student's perception, attitudes, language factors, learning styles, background of students and personal affective factors.) second social factors (the gender of students in class and feelings of student about being in a group.) and third Educational factors (the lecturer, the course and the topic in addition to pedagogical objectives and curriculum design ... etc.) The focuses on these categories helps develop a better environment of trust to develop classroom interaction but do not explain how these interactions help develop meaningful learning in EFL classes or how learners process information and generate meaning during those interactions.

Research demands more studies on contemporary classroom interactions. Classroom "participation structures and processes," and "collective meaning-making" are aspects that need further investigation in different contexts. (Crook, 2005) Investigating the social interactions in informal learning, settings using technological tools, also can provide interesting outcomes (Kovalainen, 2013, p. 53)

Change of focus entails change in methods of observation and analysis. In order to capture "learner-sensitive and reflective pedagogies" in contemporary classrooms, "the latest socio- technological developments in video research" should be utilised. (Pea, 2006) Furthermore, Rojas- Drummond et al call attention to the need of investigating "the broader socio-cultural and historical context" of classroom interactions. That is to say bringing together the "micro-levels analysis" of social construction of learning and teaching in the classroom with "the macro-level analytical perspective[s]" (Rojas-Drummond, Albarrán, Littleton, 2008)

To our knowledge, only few studies have been conducted by Algerian scholars about classroom interaction. In her work on teacher trainees at the University of Tlemcen, Djebbari draws attention to the urgent need to orient research toward classroom practices and stresses the importance of gaining understanding of what she calls the "essential pyramid process" in educational contexts. The purpose of which is to help teachers conceive new ways of "enhancing their effectiveness and thus, their success" (in the teaching of foreign languages.

(Djebbari, 2014, p. 5)

In another study conducted at Mentouri University, Constantine Boucheche claims that since the effective implementation of communicative language teaching in the Algerian education system, English language teachers became aware of the important of peer interaction in developing learners' communicative competence. Peer work activities are most effective in enhancing learner's communication in the target language (Boucheche, 2010). However, the interaction between teacher and students during class time does not receive the attention it deserves in the context of Algerian secondary education, therefore, very little is known about its nature, practices and its effects on the learners and on the conduct of the lesson. This research proposes mixed-methods research for the analysis of the processes of meaning-making and vocabulary learning in the EFL class and the impact that T/S interactions have on the meaningful learning of the English language in secondary education.

### **Conclusion**

The review discusses the theoretical background of Edusemiotics, a semiotic approach to language learning, and its relationship with Peirce's semiotic tradition. Edusemiotics is a branch of semiotics that focuses on the study of signs and their behavior, creation, and functions in educational contexts. It emphasizes the role of practical experience, sign interpretation, and logical enquiry in educational situations. The review also highlights the importance of classroom interaction in language learning and the need to understand the nature, practices, and effects of teacher-student interactions in the context of secondary education. The review suggests that learning and teaching are seen as one and the same activity in Edusemiotics, and both are based on meaning-making and sign interpretation. The review also discusses Peirce's philosophical categories of Firstness, Secondness, and Thirdness and their relationship with learning and education. Peirce's pragmatic maxim, which emphasizes the practical outcomes of learning, is also discussed. The review concludes by proposing mixed-methods research for the analysis of the processes of meaning-making and vocabulary learning in the EFL class and the impact of T/S interactions on the meaningful learning of the English language in secondary education.

# **Chapter II**

## **Methodological Design**

## **Introduction**

In this section, the nature of the study and the research paradigm underpinning it are explained. Justification for the choice and use of each data collection method is also provided. This case study is carried out with a descriptive and interpretive research design in perspective. A participant observation of EFL classes was conducted as the primary source of data which were analysed using a mixed research method. Quantitative data were analysed using a quantitative content analysis of the lesson transcripts. Data such as the number of teacher talks versus student talks and the percentages of specific utterances were calculated, while a dual qualitative method was conducted for the interpretation of qualitative data first, a content analysis of the transcripts was used to explain the nature and functions of teacher and students interactions, second, a thematic content analysis of the teachers' interviews was conducted to interpret teachers attitudes about interaction, their observations about the difficulties their student encounter in inductive setting, and their strategies and problem-solving techniques. To guarantee the credibility of the research, the appropriateness of these data collection methods is discussed in light of qualitative research criteria. The analytical framework for the study is detailed.

### **1- Rationale of the Methodological Design**

#### **1.2- The Methodological Design Adopted in this Study**

To investigate the dynamic nature of classroom interaction in the confined context of its production, a qualitative case study and quantitative content analysis are used. The main focus of this methodology choice is to provide a detailed description of the studied phenomenon by portraying the participants' linguistic behaviours and opinions as faithfully as possible.

##### **1.2. 1. Definition of Mixed Method**

In the conceptualization of Collins, Onwuegbuzie, and Sutton (2006), mixed methods research unfolds in several distinct steps a researcher can follow to ensure the coherence and validity of the study. They can be summarised as follows

- 1- Deciding the goal of the study.
- 2- Clearly define the research objectives.
- 3- Determining the research question to determine the equivalent research tools

4- Finding a purpose for using every tool and method and then reordering the rationale of the entire research design (this process can be thought and changed throughout the study, as the data often influence the process of research.)

5- The choice of the mixed methods research design or designs and the order of their application. (Two or more designs could be used in one study).

6- Collecting the data (which often involves ethnographic data collection tools questionnaires, interviews, audio/video recordings, and notes of participants' experiences within the research field. )

7- Analysing the data is where the mixed research takes its true meaning as multidimensional aspects of the data are meticulously observed, scrutinized and classified for further triangulation with other sets of information. Every additional method of analysis adds another layer of understanding that helps with a sound and valid discussion of the results.

8- Validating or legitimating the data, which depends on the transparency regarding the sources of information, the clarity of the analysis process, and the researchers' ability to provide evidence from the data and theory for every claim?

9- Interpreting the data, although data interpretation is a process related nearly to all the precedent steps, in the discussion part of the research conclusions should be drawn and clearly explained. This often includes relating the conclusions of the research with the initial research questions by reformulating and answering them.

10- In the end, writing the mixed methods research report to guide the reader through the entire process and show the reasons for the choices made along the way.

Mixing quantitative and qualitative data within a single investigation enables synergistic and more complete utilization of data than separating the analysis of quantitative and qualitative data individually (Wisdom & Creswell, 2013). In other words, this integration provides more empirical evidence and provides more room for new results to emerge from the research, thus, ensuring the validity and precision of the inquiry. For instance, qualitative data may be used to expand and clarify the outcomes of a quantitative study, while a quantitative analysis of qualitative data augments its precision and offers more detailed reasoning. The complementary aspect of these research methods results in several advantages for mixed methods of study. The first advantage consists in understanding contradictions between quantitative results and qualitative findings. And that is due to the finer detailed investigation of results that a mixed method can provide. Mixed methods are especially useful in reflecting

participants' points of view and giving them a voice to express their subjective experiences that the researcher doesn't have access to with a quantitative approach. Therefore, carefully selecting the mixed-method design that best suits the research questions and meets the study's time and resource constraints, can facilitate a deeper, more meaningful understanding of the effectiveness and implementation of Teacher/student interaction analysis within the context of EFL teaching in Algeria.

### **2.2.2- Importance of Paradigm choice**

At the core of every research study is found a complex and purposeful system of ideas, ideologies, practices, and beliefs on how research should be conducted and how it can deliver accurate results. Terre Blanche and Durrheim, (1999) assert that like interrelated pieces of a puzzle, assumptions that make a research paradigm, decide the nature of enquiry and its tools, by taking into consideration ontological, epistemological, and methodological dimensions.

First, ontology as Wand and Weber (1993) suggest, is concerned with the philosophical nature and structure of the world and how reality is articulated, and what forms of contents could be knowable about it. Second, epistemology describes the relationship between knowledge (what to know) and the knower (the researcher). Epistemology studies the nature of knowledge that humans seek and the nature of whatever leads them to seek it. An understanding of this can only be achieved through different types of inquiry (Hirschheim, Klein, and Lytinen, 1995, p. 20). Third, Methodology raises the question of how the researcher proceeds with the task of finding what he/she seeks to know. For Guba and Lincoln, (1994) the question of paradigm is primary and it should be decided on before choosing between qualitative and quantitative methods, as both may be used appropriately with any research paradigm. The latter, they define as "the basic belief system or world view that guides the investigation, not only in choices of method, but in ontologically and epistemologically fundamental ways". Guba and Lincoln (1994:105)

Positivism and Interpretivism are the main known paradigmatic currents encountered in research. These currents differ in the way research is viewed and undertaken in different academic fields. The proponents of the interpretive perspective on research in humanities consider that interpretation is a key concept in educational research on second language learning, as it includes the human factor and social dimension of language and learning. One of the main goals of this study is the analysis of individual perceptions of secondary education

EFL teachers about their experiences. The meaning of the teaching and learning phenomena is established from the standpoint of the researcher's interpretation of the teachers' and students' shared meanings, rather than through empirical measurements of student's assessment.

## **2- The Qualitative-Interpretive research in Educational Research**

The development of educational research methodology has witnessed a “paradigm shift” from positivist-quantitative to interpretivist-qualitative research designs during the last two decades (Niglas, 2007). Many researchers such as Guba and Lincoln (1994) have supported the argument that the interpretive and qualitative approach to educational research is a desirable outcome of the so-called “paradigm wars” of the 1990s (Gage, 1989; Hammersley, 1992). While other writers advocate the combination of qualitative and quantitative methods as a beneficial practice in educational research without excluding the worth of strictly quantitative or qualitative methods. (See, for example, Niglas, 2007; Bryman, 2006; Tashakkori and Teddlie, 1998, 2003; Brannen, 1992; Greene, Caracelli, & Graham, 1989)

The nature of qualitative research is also a matter of discussion. In education, Qualitative research is a term which is often interchangeable with ethnographic, subjective, and postpositivist types of research. (Savenye and Robinson, 1996; Borg and Gall, 1989; LeCompte, 1984;) The common feature between these research types is the interest in “understanding of human systems, be they small, such as a technology-using teacher and his or her students and classroom, or large, such as a cultural system.” (Savenye and Robinson, 1996, p 1046) Usually, descriptive studies such as ethnographies (description of large groups' cultures), and case studies (description of small groups' behaviours), are often aquitted with Qualitative research studies. Conducting qualitative research is about conducting interviews and observations. However, sometimes case study is considered a methodology of its own. Conducting research in a natural setting, the researchers try to manipulate the environment or the subjects of the study, and do not interfere with the natural course of events. Their sole mission is to portray human behaviours and opinions as faithfully as possible. A rich and detailed description of humans' constructed reality is what is sought by researchers. (Black 1994; Barbour 1999; Ma, 2000) They believe that in order to know “what is happening” they must understand what subjects perceive and believe is happening. Bound by the uniqueness of the setting, and the individuality of the study participants, the findings of qualitative studies are not easily generalized to other settings.

Generalizability is taken as a matter of secondary importance in qualitative research, and it is often believed that its findings are not meant for generalisation. Although this belief is widely spread among researchers, Morse (1999a) disagrees. She considers this claim as diminishing the value of qualitative research and disregarding its very utility. Indeed, the generalizability of the results increases the trustworthiness of the research and determines its quality (Stenbacka, 2001; Golafshani, 2003; Pandey and Patnaik, 2014). Instead of refuting when comparing the concept of generalizability in qualitative and quantitative research a distinct difference is noticed in terms of the definition and applicability of this concept. While generalizability is systematic in quantitative research, it can also be qualified as a statistic. If sampling is conducted right the findings from the sample are generalizable to the whole population almost automatically. However, in quantitative research, the sampling is not random but selects the participants better able to provide appropriate information according to a specific theoretical set. Thus, generalizability in qualitative research is a matter of theoretical development and the extent to which the development of explanatory frameworks, typologies, or mechanisms discovered in one context, can be expandable to other situations and other participants (Morse 1999). In support of this claim, Popay et al declare "... the aim [of generalization] is to make logical generalizations to a theoretical understanding of a similar class of phenomena rather than probabilistic generalizations to a population". (Popay et al, 1998) This drastic difference imposed a change in terminology. Lincoln & Guba (1985) replaced the term 'generalizability' with 'transferability' of qualitative findings (Ma, 2000).

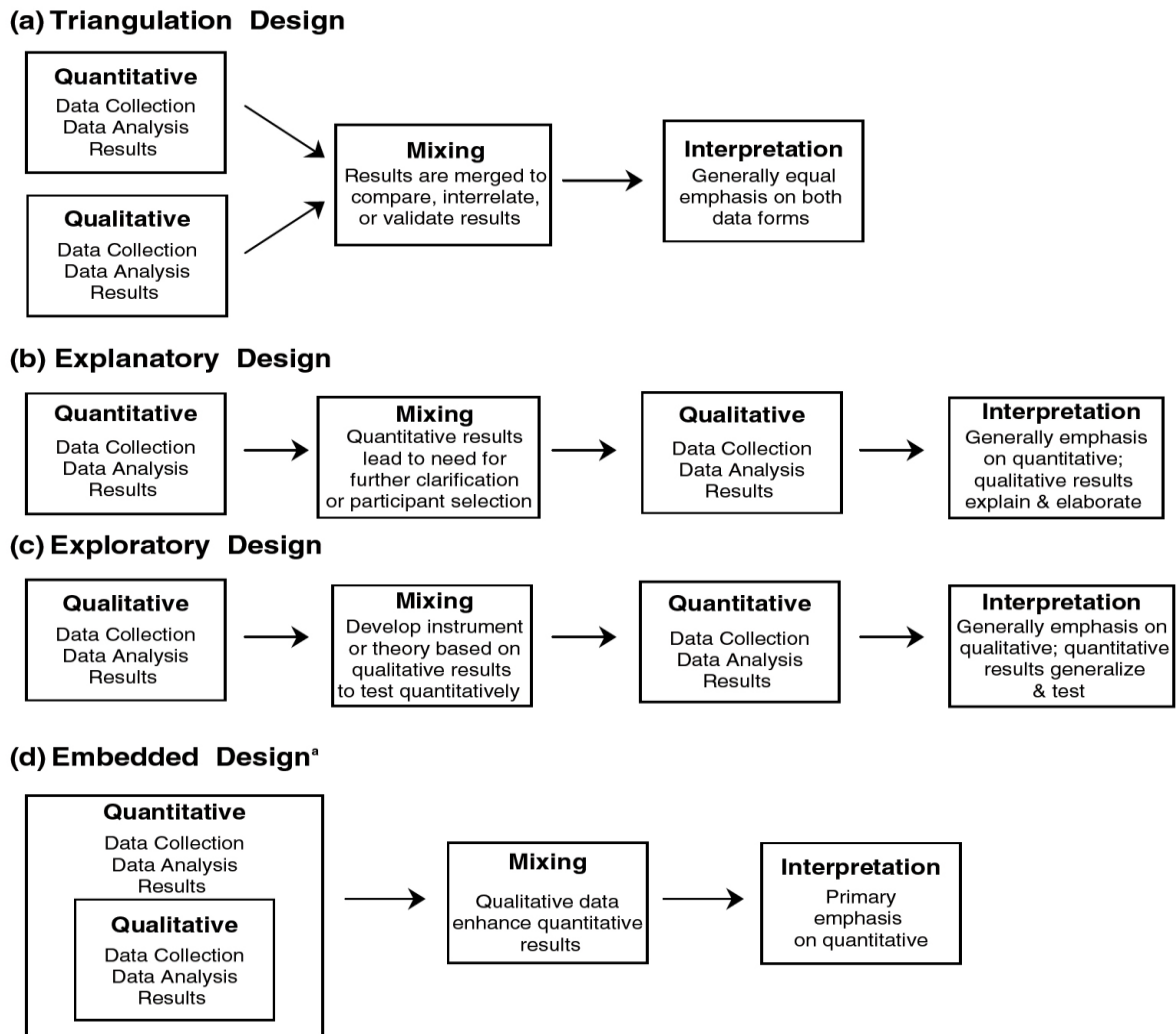
Among Lincoln and Guba's evaluative Criteria for "establishing the trustworthiness of qualitative research" (Pandey & Patnaik, 2014, p 5746), transferability is as essential for the internal validity of the interpretative research as generalizability in the positivist paradigm. Transferability could be reached through "Thick description". Lincoln and Guba explain that when a phenomenon is subject to a detailed description through different lenses, patterns start to appear, and questions arise about the extent to which the drawn conclusions could be "transferable to other times, settings, situations, and people." (Cohen & Crabtree, B. 2006)

### **3- The Research Paradigm Adopted in this Study introduction**

This part of the chapter discusses the relation of the methodological considerations with the main issues of the current study. The choice of research method determines how well the nature of the research problem is addressed and discussed within the given context of the study. In other words, the research is based on the premise that classroom experience affects directly learners' relation to the content and processes of making meaning from what they learn. As the study seeks to find a correlation between the cause and effects of what constitutes meaningful learning in the opinion of both teachers and learners, it is important to include narrations of the learning and teaching experiences from the study participants' perspectives. In other words, this study tends toward normativism, although it does not exclude a positivist approach either. In light of these aspects of the study, the research is guided by two theoretical positions which are closely allied to mixed methods research design. These are the pragmatic paradigm and the scientific inquiry. The pragmatic theoretical position is adapted in this study to place greater emphasis on the dynamic relations between all the categories of analysis. The inclusive nature of the Pragmatic paradigm permits the use of different types of mixed research methods including nested/embedded mixed research designs. The figure below shows an overview of the major mixed research designs. In addition to the plurality of methodologies, the pragmatic theoretical position is closely related to inquiry-based research which connects different domains of research, thus being suitable for multidisciplinary research subjects. In this study, the choice of Inquiry-based research is decided mainly to help with the classroom interaction dynamics analysis.

This part of the chapter discusses the relation of the methodological considerations with the main issues of the current study. The central method to consider is the triangulation mixed research method design. The following diagram describes the types of mixed Research methods.

**Figure 9 Types of Mixed Research Designs According to Huddleston-Casas et al.**



Source C. Huddleston-Casas, S. Churchill, N. Green, A. Garrett. (2008). Mixed Methods Approaches in Family Science Research. Journal of Family Issues - J FAM ISS.

### 3.1- The Methodological Research Design

Classroom interaction is a dynamic and changing phenomenon that needs to be studied in real-time in the confined context of its production. Details of language used for communication purposes by teachers and students can only be grasped through a local ethnographic approach, where full-length lectures are recorded. We turn to the pragmatic semiotics of Charles Sanders Peirce to explore the meaning-generative function of classroom interaction.

Peirce’s theory of semiotics and his views about meaningful learning, scientific enquiry, and modes of experience, and sign interpretation processes are chosen as the theoretical

background for data analysis, since the entire research follows inscribes within the research field of Edusemiotics. Below are the research goals and hypothesis that direct the present study

1-Explore the patterns and roles of T/S interaction in inductive teaching. The hypothesis is that T/S interaction is used as a problem-solving strategy during three main plenary phases lead-in, instruction, and answer-checking phases, which correspond roughly to the three inductive learning stages Brainstorming, Discussion and Production. During these phases, learners encounter considerable comprehension problems due to unsuccessful “peer-interaction” communication and insufficient vocabulary competence, this prevents them from grasping the meaning of textbook activities. Thus, teachers engage in T/S interaction to re-establish communication.

2-Determine how T/S interaction impacts the students’ meaning-making processes within inductive teaching. The hypothesis stipulates that teachers use abductive and inductive reasoning to diagnose learners’ comprehension problems before remediating them in T/S interactions. It is hypothesized that teachers initiate inquiry procedures to teach learners critical thinking strategies while endeavouring to collaboratively solve particular comprehension problems. In addition to diagnosing learners’ learning obstacles, Teacher-guided inquiry offers them tools to undertake an enquiry to remedy incorrect grammar rules and vocabulary confusion with the help of the teacher. Noting that instead of providing correct answers and language rules, teachers lead T/S interaction to guide learners to self-correct their answers.

4-Analysing the semiosis of vocabulary learning in EFL classes. When observing T/S interaction in EFL classes through the semiotic lens, it is hypothesised that in order to help learners discover the meaning of signs in the target language, Meaningful signs are brought to the learners’ attention and are strategically manipulated to enhance learners’ ability to interpret signs. Teachers organise how they present language materials to students in different ways, according to what they think is the easiest way for learners to use their background experience.

To explore the validity of the hypothesis, a complex mixed research method is conducted following these steps 1- quantitative word count analysis is used to calculate and compare the number of S/S interactions (peer-interaction) with T/S interactions, followed by a qualitative analysis in two steps a- Transcripts content analysis to determine the functions of T/S interaction in addition to b- Interview content analysis of Teachers’ unstructured interviews to analyse teacher attitudes about, inductive teaching efficiency, students learning difficulties and

teaching strategies. The main focus of this methodology is to provide a detailed description of meaning-generation processes in T/S interaction by portraying the participants' linguistic behaviours and opinions as faithfully as possible. However, before detailing the analytical framework applied in the present study, the following section will provide the details of the research Setting, the sample of study and data collection tool and data analysis methods.

### **3.1.1- Population of Study**

To conduct this research ten EFL secondary school classes, of one hour each, were recorded between January 2017 and April 2017. The sample was randomly chosen from three secondary schools in the region of Tizi-Ouzou and its surrounding towns. The targeted population was constituted of two freshman year classes, two sophomore year classes and one senior year class. Students were aware that they were recorded after permission was granted by the teachers. The five female teachers of English who participated in this study are from the Wilaya of Tizi-Ouzou. All of them have more than five years of experience teaching English in a secondary school. Participant Observations were carried out in ten different classes divided as follows one first-year class, two third-year classes, and seven second-year classes. Each class was composed roughly of thirty-plus students. All classes were heterogeneous in nature as most learners came from different public middle schools with different levels of performance in English.

### **3.2- Data Collection Procedure**

Concerning the research procedure, the participant classroom observation sessions were randomly chosen. A total of Ten EFL classes in secondary school were audio-recorded with the awareness and permission of both the teachers and students. Unstructured interviews were used to explore teachers' attitudes about their classroom experiences. A number of questions were asked to teachers at the end of each class. The number and nature of the questions asked to each teacher are chosen according to the topic and materials used in each individual class.

The aim of the research being the adoption of inquiry-based interaction in EFL classes it becomes important to analyse the teachers' influence on the inquiry process. Qualitative research was applied to the collection and analysis of the corpus of the study. Excerpts from the recorded lesson scripts are analysed using data-driven analysis and interaction analysis (IA). The interactive dialogues extracted from each lesson are discussed in relation to the Peircean inquiry theory. It is argued that both teachers and students experience multiple doubt-belief

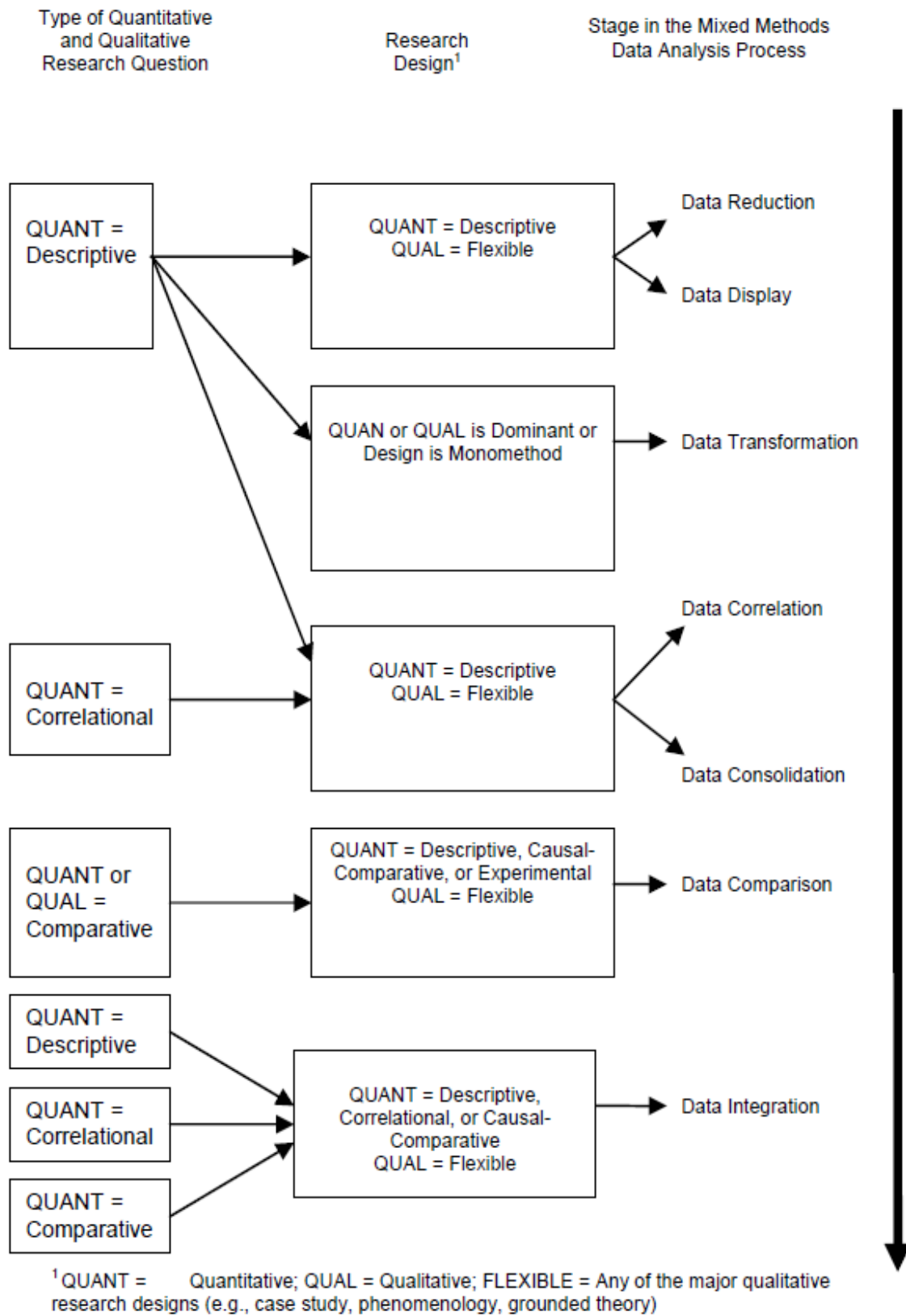
cycles throughout the lesson, therefore, the cognitive and pragmatic aspects of the language used in the classroom are also brought to light and explained.

### **3.3- The Nature of the Methodological Design Adopted in This Study**

The type of research design conducted in this study it is closely related to the research question and the purposes of the research. Onwuegbuzie and Leech (2006) suggest that it is possible to analyse the same mixed research question in multiple ways, but they recommend the use of two procedures or more to apply data-analysis triangulation to their interpretations. Accordingly, and relying on the terminology of Onwuegbuzie and Leech (2006) this study can be described as a phenomenological case study conducted using a concurrent-descriptive mixed method. It is phenomenological because it describes the teaching experiences of the five research participants. It is a case study because it discusses the implications of teacher/student interaction processes on the generation of new meanings in the particular context of secondary education EFL classes in the mentioned area.

Thus, it falls under the mixed methods paradigm for it combines a descriptive/comparative quantitative analysis with multilevel qualitative analysis. While the quantitative component describes the recurrence and nature of classroom utterances, it also allows the comparison of different variables. The qualitative component, however, is concurrent as it describes and interprets the relationships between the different qualitative data with the quantitative results. It is worth noting that, although both the quantitative and the qualitative data were collected in parallel, the quantitative data only served to describe the number and patterns of classroom language patterns to inform the qualitative analysis and to generate the guiding research questions for the entire study. This is why it can be considered a Concurrent Nested Strategy. (Terrell, 2012) the next diagram shows the research questions about the research design and the stages of the mixed data analysis.

**Figure 10 Types of Research Questions Mixed Research Designs**



Source Onwuegbuzie, A. J., & Leech, N. L. (2006). Linking research questions to mixed methods data analysis procedures. *The qualitative report*, 11(3), 474-498.

### **3.4- Data collection and data analysis methods**

#### **3.4.1- Classroom Observations Definitions and Implimentation**

Flick (2006) describes observation as “an attempt to observe events as they naturally occur.” (Flick, 2006, p. 219) In a methodological sense, Classroom Observation is a research tool carried out purposefully in class which serves the research questions and objectives. Burns (1999) suggests that, to use this method, the researcher needs to observe the “classroom interactions and events, as they actually occur” (Burns, 1999, p. 80). The goal is to enable the researcher to collect information objectively. By combining observation with other data collection methods such as questionnaires and interviews, it is possible to carry out data triangulation in order to validate the findings (Merriam, 1998; Johnson & Turner, 2003). In the field of human sciences, particularly in educational research, the researcher seeks to comprehend participants’ interpretations and attitudes toward context bound phenomena.

#### **3.4.2- Classroom Observation Analysis methods**

##### **A- Thematic discourse analysis**

Thematic discourse analysis is applied to detect and organise the observations made in class and analyse the different phenomena that compose the classroom experiences of the research participants for this present study.

The goal of the thematic analysis is to analyse the collected observations of Classroom Language Patterns in terms of conceptual categories from the chosen theory and then discuss the results of the analysis by speculating about the relationship between the classroom discourse and students’ learning patterns. The resulting themes of the research observations will be divided into categories according to the research questions and displayed in tables. The observed data are organised into three categories A- Complete lesson transcripts from audio recordings. B- Stages Sequencing and lesson procedures C- Teachers’ interviews analysis.

##### **B- Word Count**

Based on the assumption that people have individual language use patterns, and since no two people have similar ways of using words, it is possible to explore personal differences through the study of their personalized word patterns. (Pennebaker, Mehl, & Niederhoffer, 2003) As some words are used more frequently than others in different situations by different people, “word counts” becomes more significant when trying to analyse the thinking patterns

of teachers and students, as well as to discover the focus of their attention as they speak. One way of using this type of quantitative analysis is to count the number of times one or more specific words are used. The rate of recurrence of these words is then calculated and compared. This analysis is usually done after all the audio data were collected and transcribed. (Carley, 1993) However, one major limitation of this study may be that some contextual elements cannot be acquired directly through the analysed text. Therefore, a further qualitative analysis may be necessary to discover the purposes that motivate speakers to use words the way they do.

### **C- Unstructured interviews**

Sometimes referred to as ‘discovery interviews’, this format of qualitative data collection allows in-depth research that seeks details from the respondents’ personal views and experiences as it enables them to express their mind in their own pace with minimal influence from the researcher. They contain open-ended questions that can be asked in any order. Some questions might be added / missed as the Interview progresses. (McLeod, 2014, p. 2)

This type of framework is particularly useful when asking teachers to describe their teaching strategies and personal teaching styles. Because of the large differences from one teacher to another, no structured interview could capture the entire spectrum of creative practices of all participants.

### **Summary**

This chapter discussed the methodological and analytical design of the research. A rationale was provided for the choice of the pragmatic research paradigm and the conduct of a mixed research method for the collection and analysis of data. A brief definition of the nature and types of mixed research methods provided an overview of their advantages and limitations. Finally, the nature of the mixed research method used in this study is revealed and described in terms of the data collection techniques and data analysis methods. Qualitative data were collected using classroom observations and unstructured interviews with teachers, while, a word count approach is employed to examine the patterns of teachers’ and students’ interactions in class quantitatively. The complexity of the topic led to the use of multilevel analysis. Thus, the methodological design developed sequentially through five discussion chapters, each addressing a different question.

# **Practical Part**

## **Chapter III Results**

# **Results Section One**

## **Description of the Research Primary Data**

## **Introduction:**

This chapter displays the most relevant data analysis results which constitute the core results to be discussed in the different sections of the research. The Results chapter has three parts. First, it displays primary sources description (the teachers' official guide to the EFL syllabus, and student's books). Second the results of the Results of the Quantitative Analysis of the Corpus, followed by the summary of the Qualitative analysis of teachers' interviews, and secondary qualitative data.

This case study research focuses on EFL teachers and Students of the three levels of EFL secondary education. Providing an overview of the EFL syllabus, a description of the student books is part of the primary resources of data collection for the study of the EFL secondary education program.

## **I. Description of Students Books as EFL Syllabus Teaching Tool**

### **1- Secondary Education yearbook one**

According to the Ministry of Education the textbook "At the Crossroads" corroborates the new English studies syllabus for the First Year of Secondary Education as formulated in January 2005. The overall aim of At the Crossroads is to help learners, who have already four years' instruction in English at Middle School level, to consolidate and extend the competencies supposedly acquired at the Middle School (i.e. interacting orally in English - interpreting oral and written texts - producing oral and written texts) these competencies are broadly included in each of the thematically distant five units. To allow for an equal practice of each competence, each unit includes four sequences which are Section 1 listening and speaking Section2 reading and writing Section3 developing skills Section4 consolidation and extension.

### **2- Secondary Education Yearbook Two**

The overall aim of Yearbook Two "Getting Through" is to ensure a smooth Learning of the different skills and competencies to help learners make sense of the their progress, Five different stages are devised

Section 1 Discovering Language Different practice activities enable learners to work with new words and expressions in context, enabling learners to discover, through, observation and inference elements of vocabulary, grammar, spelling, pronunciation and, the phonetic transcription of words.

Section 2 Developing Skills is designed to develop learners listening and speaking abilities. (the focus is on building interaction skills and basic language skills as well as

intellectual skills (thinking, guessing, anticipating, making hypotheses, analysing, synthesizing, planning, monitoring progress, etc.).

Section 3 In section Putting Things Together learners use all the skills they have acquired in context by doing a project. They will have the opportunity to combine primary and social skills and thus display their individual achievements in form of a project outcome at the end of each unit.

Section 4 Where Do We Go From Here? At this stage, learners' develop self-assessment, skills by checking their own progress through various means, including filling grids and performing activities about the entire unit's contents.

Section 5 Exploring Matters Further Providing a larger range of texts and activities, this section is designed to broaden learners' practice of language skills through various language materials. Furthermore, it gives learners the opportunity to consolidate grammar structures, to learn more vocabulary and discover various kinds of texts.

### III- General Aims of the English program for Secondary School Teachers and Students

Each secondary year textbook implicitly prioritizes a few skills according to students' levels. The three course books constitute a series implying that there is an intention of continuity involved in the design and goal formulating of each course book.

#### 3- Objectives and targeted competences in the three levels of secondary education

The major aims of the EFL program is to develop three basic competencies in EFL learner 1- To Interact orally in English., 3- to Interpret oral and written messages; and 3- to Produce oral and written messages. The relation between the functions and immediate task goals with larger language skills and competencies development is demonstrated in the following table

**Table 3 Language Skills in Secondary Education English Textbooks**

<b>Competency Type</b>	<b>Language skills</b>	<b>Functions is the Textbooks</b>	<b>Rubrics Key Functions</b>
<b>Interaction Competency</b>	<b>Oral Interaction</b>	<ul style="list-style-type: none"> <li>- Start and maintain a conversation involving two people in a variety in contexts and situations,</li> <li>- Participate in a basic discussion and group decision making</li> <li>- Exchange of ideas and opinions</li> <li>- Plan for, use and evaluate the effectiveness of Spoken Interaction Strategies,</li> </ul>	Greetings, asking questions, giving and seeking facts and opinions, apologizing, asking for and offering help, making plans, giving opinions and advice.

		<ul style="list-style-type: none"> <li>- Maintain conversations, get and give turns,</li> <li>- Convey the meaning of unknown language</li> <li>- Communicate and check understanding.</li> </ul>	
	<b>Productive Speaking</b>	<ul style="list-style-type: none"> <li>- Sustain an oral narrative of past events.</li> <li>- Describe a persons and/ or a familiar matter/place.</li> <li>- Short oral report/ presentation of a mini research project prepared in groups.</li> </ul>	<p>Short cohesive paragraph. Describing basic sensory details and plans, nature... etc.</p>
<b>Interpretation competency</b>	<b>Interpretive Listening</b>	<ul style="list-style-type: none"> <li>- Listen and understand main points and the important details of medium-length monologs, Dialogues, Radio broadcasts.</li> <li>- Make conversations with two to three people.</li> <li>- Listen and follow directions or instructions.</li> </ul>	<p>Conversing about Interests, Global issues and historical events; Give / receive directions and/or instructions.</p>
	<b>Interpretive Reading</b>	<ul style="list-style-type: none"> <li>- Read and understand the main points and significant details of short expository texts.</li> <li>- Can identify the argument line and organize arguments in argumentative texts.</li> <li>- Read and understand details sufficiently enough to make specific, short responses to comprehension questions.</li> <li>- Clarify and/or summarize information &amp; texts.</li> <li>- Learn several reading strategies.</li> </ul>	<p>Make sense of Encyclopaedia entries, award nominations, eye witness accounts. Dealing with familiar matters such as comprehending personal letters. Describing events, feelings/opinions and wishes. Develop brainstorming, argumentation, and inference skills.</p>
<b>Productive competency</b>	<b>Productive Writing</b>	<ul style="list-style-type: none"> <li>- Write narrative, descriptive and expository texts</li> <li>- Write a short, persuasive letters</li> <li>- write about the news</li> <li>- write about topics of interest of both concrete and more abstract nature</li> <li>- responding to the news of his/her correspondent</li> </ul>	<p>Exhibiting characteristics of an argument Expressing thoughts and opinions Following a conventional writing format. (letter, news report, persuasive text...etc)</p>
	<b>Linguistic</b>	Vocabulary	Comprehension of key

<b>Competency</b>	Effectively choice and use of vocabulary items needed to express ideas in topics pertinent to school and community life.	words in context Appropriate and accurate grammatical structures Correct and clear pronunciation, Application of stress and intonation in connected speech
	<b>Grammar</b> Grammar needed for accuracy to the comprehension and expression of ideas.	
	<b>Pronunciation</b> Right word and sentence pronunciation to increase intelligibly and avoid mispronunciation.	

Textbook unites and rubrics are organized in a way to permit the practice of one language skill at a time. For instance language interpretation is related to reading comprehension and listening tasks, while oral interaction is given prominence in speaking tasks. Even with this seemingly isolating classification of skills, it is nearly impossible to develop one without the others. In fact, in all three textbooks, each rubric includes all three competencies of interaction, interpretation and production which in turn constitute building blocks for more complex competencies. At the end of the secondary education level, learners are expected to achieve mainly three major competencies the grammatical/linguistic competence, the communicative competence (accuracy/fluency) ; The relation between all types of competencies is displayed in the table below

**Table 4 Target Competencies in Secondary Education EFL Teacher's Guide**

<b>Language skills</b>	<b>Competence Type</b>	<b>Higher Competencies</b>
<b>Interpretive Reading</b>	<b>Interpretation Competence</b>	<b>Pragmatic / Communicative Competency</b> <u>Inference of Oral &amp; Written messages</u>
<b>Interpretive Listening</b>	<b>Interpretation Competence</b> <u>Oral Interaction</u>	
<b>Productive Speaking</b>	<b>Production Competence</b> <u>Oral Interaction</u>	<b>Pragmatic / Communicative Competency</b> <u>Inference &amp; Exchange of Oral &amp; Written messages</u>
<b>Productive Writing</b>	<b>Production Competence</b>	
<b>Grammar/Vocabulary/Phonetics</b>	<b>Semantic - Grammatical Competence</b>	<b>Linguistic Competency</b> <u>Acquisition of Sentence Grammar and Word Meaning</u>

### Description of the Research's Corpus

The corpus of this research is constituted of ten recorded and transcribed EFL classes. The table below provides descriptions of each class in terms of title, level of instruction, lesson goals and the general topics it treats of. The table below classifies the number of recorded classes in each Secondary Education level.

**Table 5 Number of Recorded and Transcribed Lessons in each SE Level**

Level of instruction	Number of recorded lessons
First year ( <b>beginning</b> of secondary education program)	<b>2 classes</b>
Second year ( <b>progress</b> of secondary education program)	<b>6 classes</b>
Third year ( <b>final</b> year of secondary education program)	<b>2 classes</b>

**Table 6: Ten Lesson Transcripts Organized by Level and Topic**

Level	Lesson scripts	Lesson types	Lesson topic/ focus
Beginning Yearbook 01 “At the Crossroads”	<b>Lesson transcript 02</b>	Grammar / Mrs M/ Year 1/ Unit 05	Describing Water Quantities Raising Environmental Awareness. Quantifiers/countable/uncountable nouns
	<b>Lesson transcript 07</b>	Reading comprehension/ vocabulary/ Mrs H / unit 05/(Lesson 7)	Pollution, Global Warming, protection of the environment.
Progress Yearbook 02 “Getting Through ”	<b>Lesson transcript 01</b>	Grammar / Pre- Writing (Class 1) Mrs F / Year 2 / Unit 03 Discovering Language	CEO of Oil Shipping company apologises for the damages his wrecked ship has caused for locals. Environment/ speech/ press release.
	<b>Lesson transcript 03</b>	Vocabulary / Pre- Writing (Lesson 3) Mrs H / Year 2/ unit 03	Writing a press release CEO of Oil Shipping company apologises for the damages his wrecked ship has caused for locals of the coasts of Alaska.

			Environment/ speech/ press release
	<b>Lesson transcript 05</b>	Mrs N/ year 2/ unit 03/ (Lesson 5) say it discovery language / Loud and clear phonetics	Correct pronunciation of word and sentence intonation in speech.  - Describing clean energy devices' building processes and  - Listing types clean energies
	<b>Lesson transcript 06</b>	Mrs N / year 2/ unit 02/ (Lesson 6) Grammar/ pre-writing Expressing obligation and prohibition	Writing a classroom charter for students' rights and duties in class.
	<b>Lesson transcript 08</b>	Lesson transcript 08/ Year 2/ Mrs H unit 07 science or fiction / grammar practice/ discovery language	Expressing wishes and regrets / The Conditional Tense
	<b>Lesson transcript 10</b>	Mrs B/ year 2/ (Lesson 10)/ unit 2 Reading comprehension Vocabulary Pre-writing Reading and Writing	- Conflict resolution - another aspect of injustice -talk about abuse of human rights - prior knowledge of history slave trade -analyze public speech style -write a public address
Final Yearbook 03 "New prospects"	<b>Lesson transcript 04</b>	Mrs B/ Year 3/ (Lesson 4) Think pair share Pre-writing Unit 04 Advertising, Consumers, and Safety Sequence 02 Read and consider Writing an expository article	Causes and effects of Changing food habits of Algerian people.  goal Writing a short magazine article  Topic causes and consequences of Algerians' changing eating habits
	<b>Lesson transcript 09</b>	Grammar Explorer year 3 Mrs H	Unit 2 Ill-Gotten Gains Never Prosper. Form and use of the passive voice

**Lesson Types and Topics of Lesson Transcripts**

**Table 7 Phonetics Lesson (Lesson Transcript 5)**

<b>Phonetics lessons</b>		
<b>Inductive method</b> <ul style="list-style-type: none"> <li>- <b>Brainstorming</b></li> <li>- <b>- Eliciting example</b></li> <li>- <b>- Discussing meaning of examples</b></li> <li>- <b>Discussion</b></li> <li>- <b>- Exploring sentence structure</b></li> <li>- <b>- Notice pronunciation</b></li> <li>- <b>Production - Practice pronunciation</b></li> </ul>		
<b>Lesson transcript 05</b>	Mrs N/ year 2/ unit 03/ (Lesson 5) say it discovery language / Loud and clear / phonetics	Correct pronunciation of word and sentence intonation in speech. - Describing clean energy devices building processes and - Listing types clean energies

**Table 8 Vocabulary Lessons/Pre-writing Transcripts**

<b>Vocabulary lessons/pre-writing</b>		
<b>Method</b>		
<ul style="list-style-type: none"> <li>- <b>Brain storming</b></li> <li>- <b>-interpretation of visual material</b></li> <li>- <b>-Guessing the text's topic</b></li> <li>- <b>Discussing</b></li> <li>- <b>- eliciting/ explaining Vocabulary</b></li> <li>- <b>- Sentence structure</b></li> </ul> <p><b>Producing Task Tips for writing about the topic</b></p>		
<b>Lesson transcript 03</b>	Vocabulary / Pre-Writing (Lesson 3) Mrs H / Year 2/ unit 03	Writing a press release CEO of Oil Shipping company apologises for the damages his wrecked ship has caused for locals of the coasts of Alaska. Environment/ speech/ press release

<b>Lesson transcript 04</b>	<p>Mrs B/ Year 3/ (Lesson 4)</p> <p>Think pair share</p> <p>Pre-writing</p> <p>Unit 04 Advertising, Consumers, and Safety</p> <p>Sequence 02 Read and consider Writing an expository article</p>	<p>Causes and effects of Changing food habits of Algerian people.</p> <p>goal Writing a short magazine article</p> <p>Topic causes and consequences of Algerians' changing eating habits</p>
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**Table 9 Grammar Lessons Transcripts**

<b>Grammar lessons</b>		
<b>Method</b>		
<b>Five types of inductive grammar lessons</b>		
<b>Lesson transcript 02</b>	<p>Grammar / Mrs M/ Year 1/ Unit 05</p>	<p>Describing</p> <p>Water Quantities and Rising Environmental Awareness.</p> <p>Quantifiers/countable/uncountable nouns</p>
<b>Lesson transcript 01</b>	<p>Grammar / Pre-Writing (Class 1) Mrs F / Year 2 / Unit 03 Discovering Language</p>	<p>CEO of Oil Shipping company apologises for the damages his wrecked ship has caused for locals.</p> <p>Environment/ speech/ press release.</p>
<b>Lesson transcript 08</b>	<p>Lesson transcript 08/ Year 2 Mrs H unit 07 science or fiction / grammar practice, discovery language/ (Lesson 8)</p>	<p>Expressing wishes and regrets / The Conditional Tense</p>

<b>Lesson transcript 06</b>	Mrs N / year 2/ unit 02/ (Lesson 6) Grammar/ pre-writing Expressing obligation and prohibition	Writing a classroom charter for students' rights and duties in class.
<b>Lesson transcript 09</b>	Grammar Explorer year 3 Mrs H	Unit 2 Ill-Gotten Gains Never Prosper. Form and use of the passive voice

**Table 10 Reading Comprehension Lessons Transcripts**

<b>Reading comprehension lessons</b>		
<p><b>Method</b></p> <ul style="list-style-type: none"> <li>- <b>Brain storming</b></li> <li>-           <b>-interpretation of visual material</b></li> <li>-           <b>-Guessing the text's topic</b></li> <li>- <b>Discussing</b></li> <li>-           <b>- Reading/Familiarizing with the text Finding the gist</b></li> <li>-           <b>-Vocabulary</b></li> <li>-           <b>-Discussing the type and style</b></li> <li>- <b>Producing Tips for writing similar text</b></li> </ul>		
<b>Lesson transcript 07</b>	Reading comprehension/ vocabulary/ Mrs H / unit 05/ (Lesson 7)	Pollution, Global Warming, protection of the environment.

<b>Lesson transcript 10</b>	<p>Mrs B/ year 2/ (Lesson 10)/ unit 2</p> <p>Reading comprehension</p> <p>Vocabulary</p> <p>Pre-writing</p> <p>Reading and Writing</p>	<ul style="list-style-type: none"> <li>- Conflict resolution</li> <li>- another aspect of injustice</li> <li>-talk about abuse of human rights</li> <li>- prior knowledge of history slave trade</li> <li>-analyze public speech style</li> <li>-write a public address</li> </ul>
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Source students' textbooks, teachers' guides and classroom observation notes.

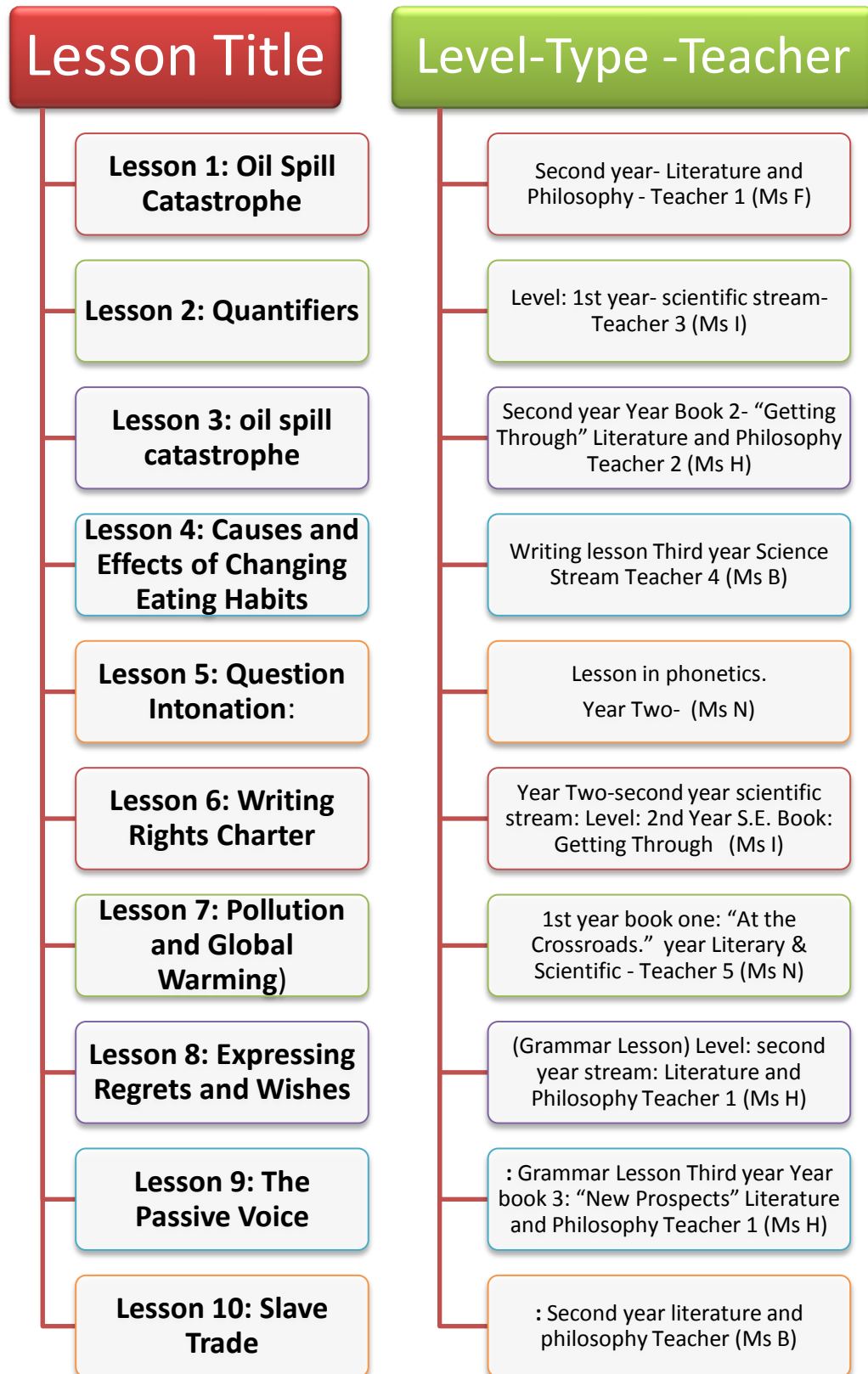
**Table 11 Description of the Ten Recorded Lessons**

Lesson Type	Topic and Context
Grammar / pre-writing (lesson 1) Mrs F / year 2/ unit 03 waste not want not	CEO of oil shipping company apologises for the damages his wrecked ship has caused for locals. discovering language environment/ speech/ press release
Grammar / c2/ Mrs I/ year 1/ unit 05 (lesson 2)	Describing water quantities and rising environmental awareness. quantifiers/countable/uncountable nouns
Vocabulary / pre-writing (lesson 3) Mrs H / year 2/ unit 03	Writing a press release ceo of oil shipping company apologises for the damages his wrecked ship has caused for locals of the coasts of Alaska. environment/ speech/ press release
Ms B/ year 3/ (lesson 4) Think pair share pre-writing unit 04 advertising, consumers, and safety sequence 02 read and consider writing an expository article	Causes and effects of changing food habits of algerian people. goal writing a short magazine article  topic causes and consequences of algerians' changing eating habits
Mrs N/ year 2/ unit 03/ (Lesson 5) Say it discovery language / loud and clear / phonetics	Correct pronunciation of word and sentence intonation in speech. - describing clean energy devices' building processes and - listing types clean energies
Mrs N / year 2/ unit 02/ (lesson 6) Grammar/ pre-writing expressing obligation and prohibition	Writing a classroom charter for students' rights and duties in class.
Reading comprehension/ vocabulary/ Mrs h / unit 05/ (lesson 7) year 1	Pollution, global warming, protection of the environment.
Lesson Transcript 08/ year 2 Mrs H unit 07 science or fiction / grammar practice/ discovery language/ (lesson 8)	Expressing wishes and regrets / the conditional tense
grammar/ year 3/ Mrs h / (lesson 9) unit 2 ill-gotten gains never prosper.	Form and use of the passive voice
Mrs B/ year 2/ (lesson 10)/ unit 2 Reading comprehension Vocabulary Pre-Writing Reading and Writing	- Conflict resolution - Another aspect of injustice -Talk about abuse of human rights - Prior knowledge of history slave trade -Analyze public speech style -Write a public address

Table 1 organized by order of collection

The following graph illustrates the number and details of each recorded lessons. In the next section the contribution of both teachers and students in each lesson script is analyzed quantitatively and the results are presented using illustrative graphs.

**Diagram Title, Type and Level of Recorded Lessons**



## **Results Section Two**

### **Results of the Quantitative Analysis of the Corpus**

## **Results of the Quantitative Analysis of the Corpus**

In this section, the ten scripts of the recorded lessons are analyzed quantitatively. The aim of this analysis is the exploration of the nature of verbal and non-verbal structures used by the participant teachers and students. The preliminary examination of classroom language during teacher/student interaction shows different types of linguistic structures as well as non-linguistic elements, such as, gestures and facial expressions. We hypothesise that each of these structures play a significant role in the classroom practice.

### **1. Categories of Analysis**

**Teacher and Students' Utterances** the number of utterances produced by the teacher during the entire class time is calculated and compared with the number of utterances produced by her students to establish a comparison between the amount of teacher talk and student talk in EFL classes.

**Nature of Teacher's Discourse** particular attention is given to the structure and functions of the utterances that teachers produced in their classes, as they can provide much insight on the nature of methods and strategies employed in class.

**Nature of Students' Participation** to explore the nature of student talk and its functions as well as examine secondary school students' level of proficiency in the target language, by examining the nature of their classroom language.

**Languages used in class** Due to the heterogeneity of the linguistic background of the participants, both the teachers and the students speak up to four languages depending on the regions they came from. It is therefore of interest to the research to account for the use of these first and second languages i.e. (Kabyle- Colloquial Arabic- Classical Arabic- French) during each lesson enclosing the target language English.

**1.1. Quantitative Class 01- Lesson Oil Spill Catastrophe Teacher 1 ( Mrs F)**

**1.1.1. Number of Teacher and Students' Utterances -01**

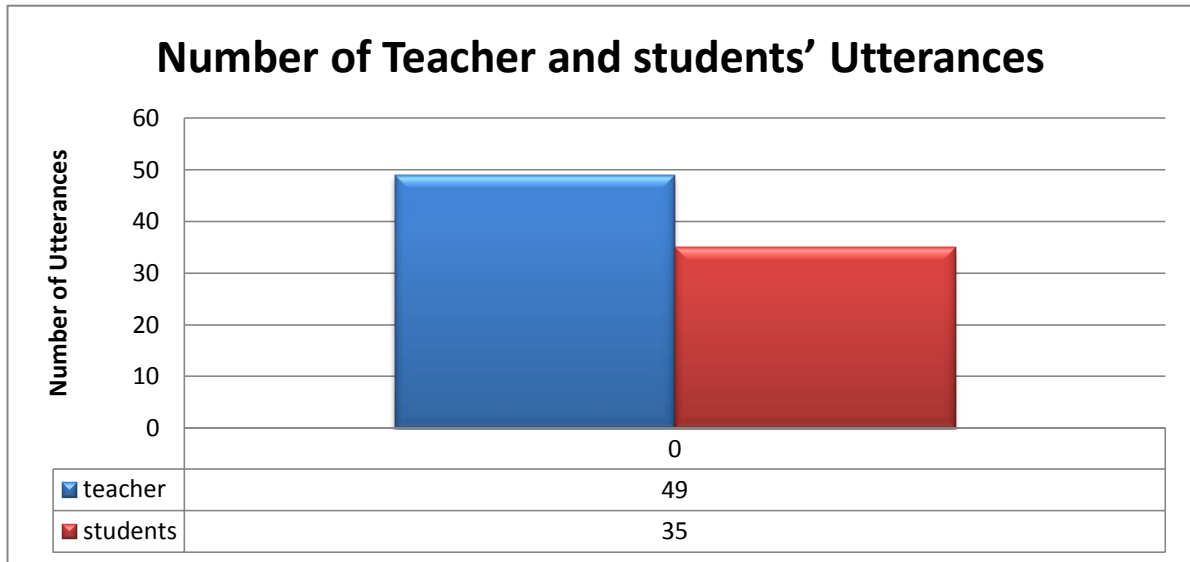


Figure 12 Lesson Script 1 Number of Teacher's and Students' Utterances

**1.1.2. Nature of Teacher's Discourse**

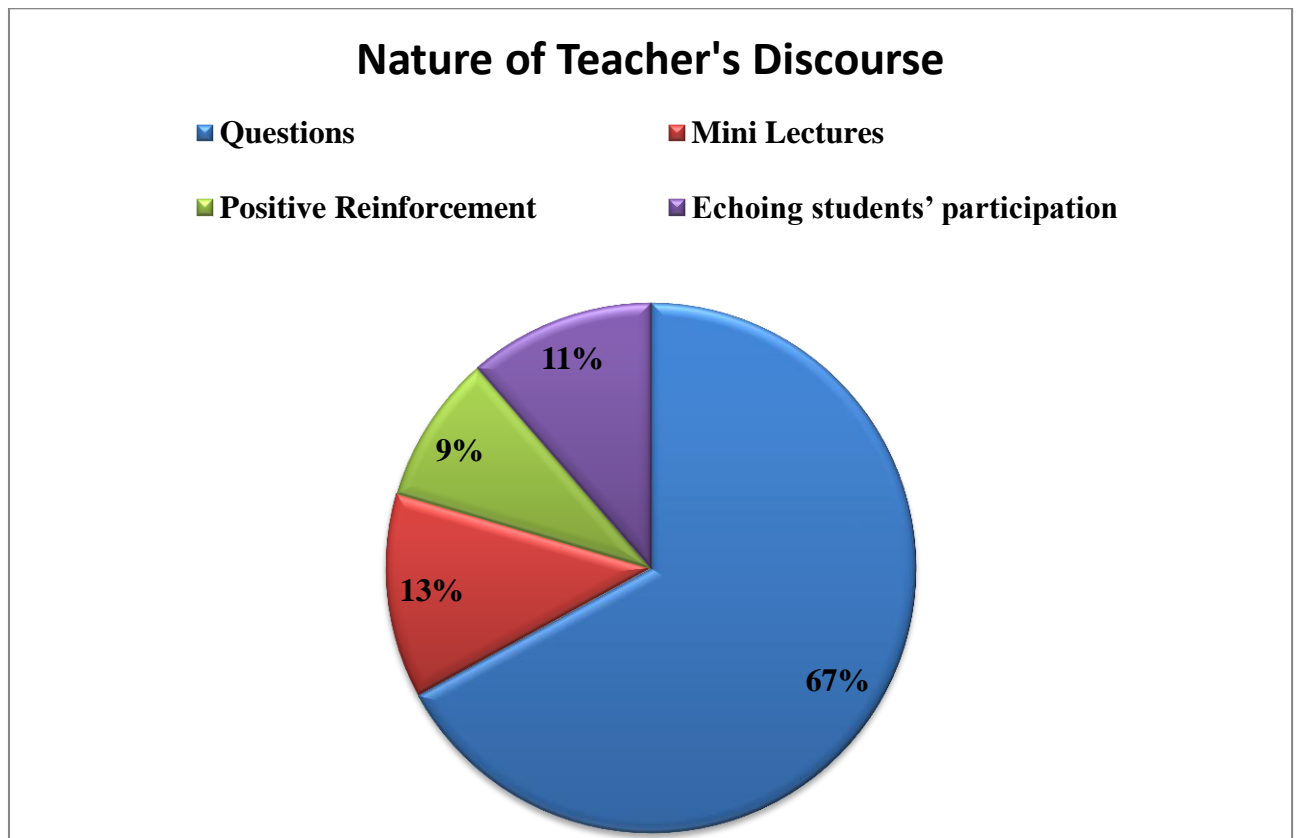


Figure 13 Lesson Script 1 Nature of Teacher's Discourse

### 1.1.3. Nature of Students' Participation -01-

Table 0-1 Lesson Script 1 Nature of Teacher's Classroom Discourse

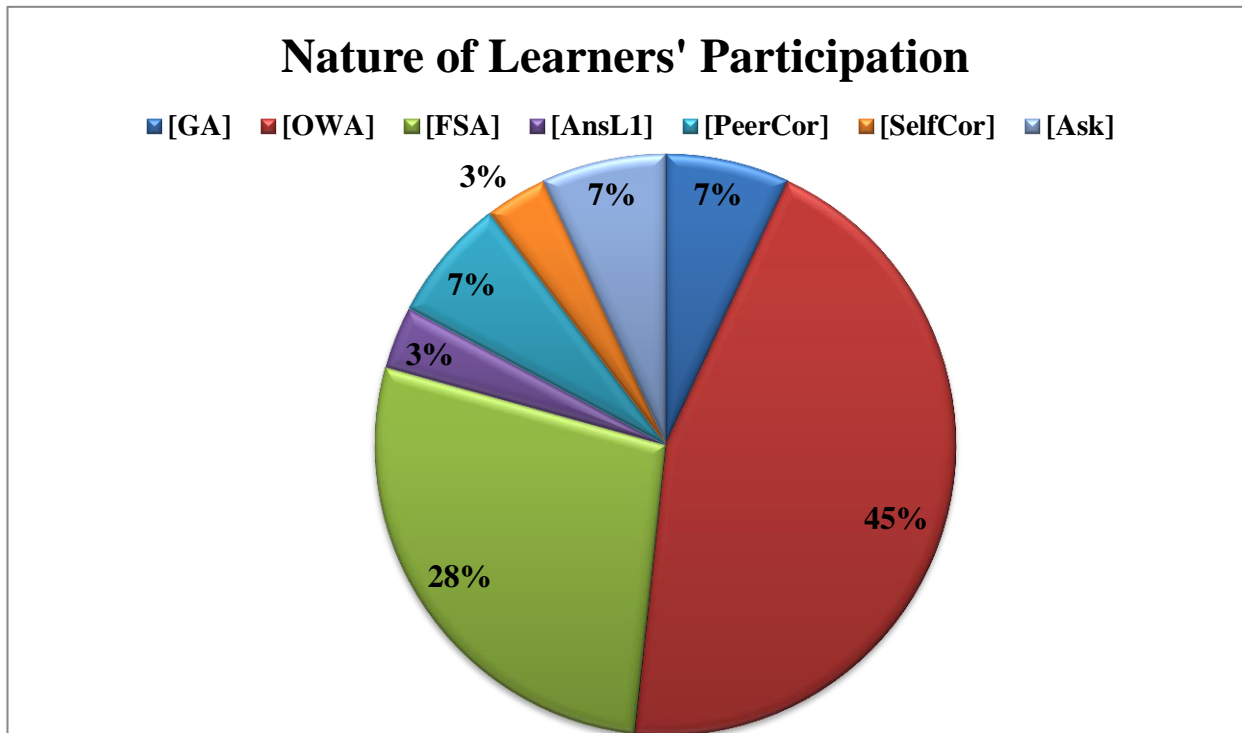


Figure 14 Lesson Script 1 Nature of Learners' Participation

#### 1.1.4. Quantitative results description of Lesson Script 01

The first graph shows that the classroom interaction involved both the teacher and the students. A slight dominance of Teacher talk is registered with 58 percent of classroom talk against 42 per cent of student talk. The second graphs detail the functions that the teacher performs during class time conversation. The teachers spend sixty-seven per cent of their classroom time asking questions. That is to say, the majority of teacher talk is devoted to eliciting answers from the learners, thus encouraging them to participate in class. What remains of teacher talk is spent in actively engaging conversation with the learners by echoing students' participation, offering feedback and providing explanations. Only thirteen percent of Teacher talk is spent on lecturing. In the third graph Students show various responses to the teacher's talk. When asked a question students to mostly reply in one word answers, that means that instead of producing a complete answer they utter one word or answer with either yes or no. only twenty eight per cent of students' answers come in full sentences. In fewer instances, students had recourse to their first or second language to express themselves. Seven per cent of student talk students also initiate the conversation by asking questions, correct their own mistakes, or correct their peer errors.

**1.2. Class 02 [Grammar Lesson the use of Quantifiers]**

**1.2.1. Lesson transcript 02 Number of Teacher and Students' Utterances -02**

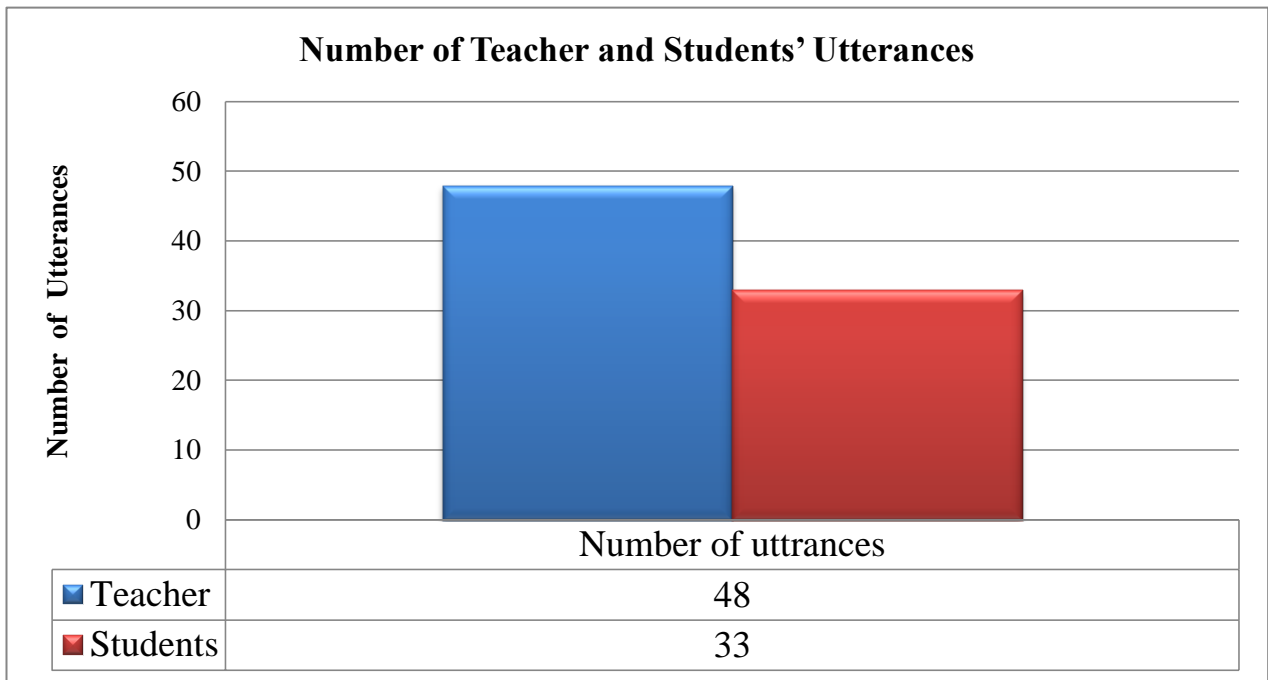


Figure 15 Transcript 2 Number of Teacher and Students' Utterances -02

**1.2.1. Lesson transcript 01 Nature of teacher's discourse**

Table 0.2 Lesson Script 2 Nature of Teacher's Discourse

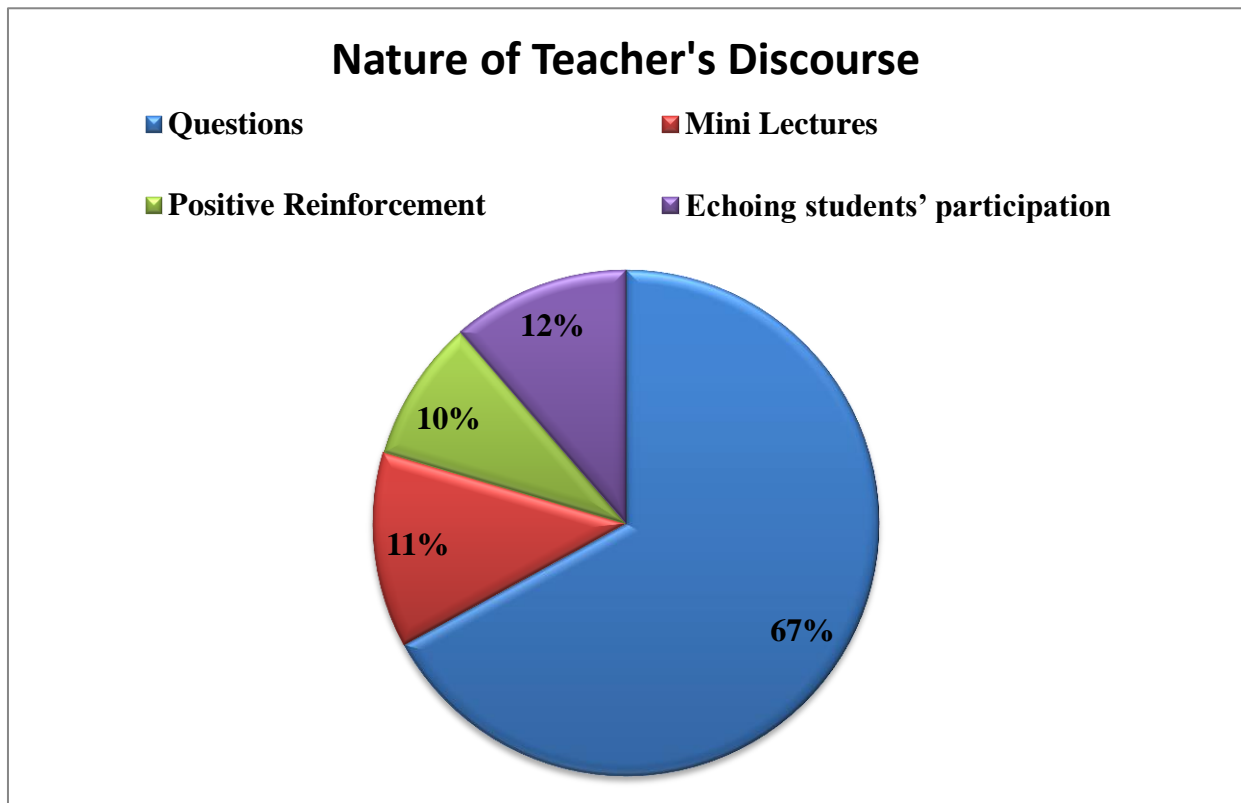


Figure 16 Lesson Script 2 Nature of Teacher's Discourse

### 1.2.2. Students' Participation

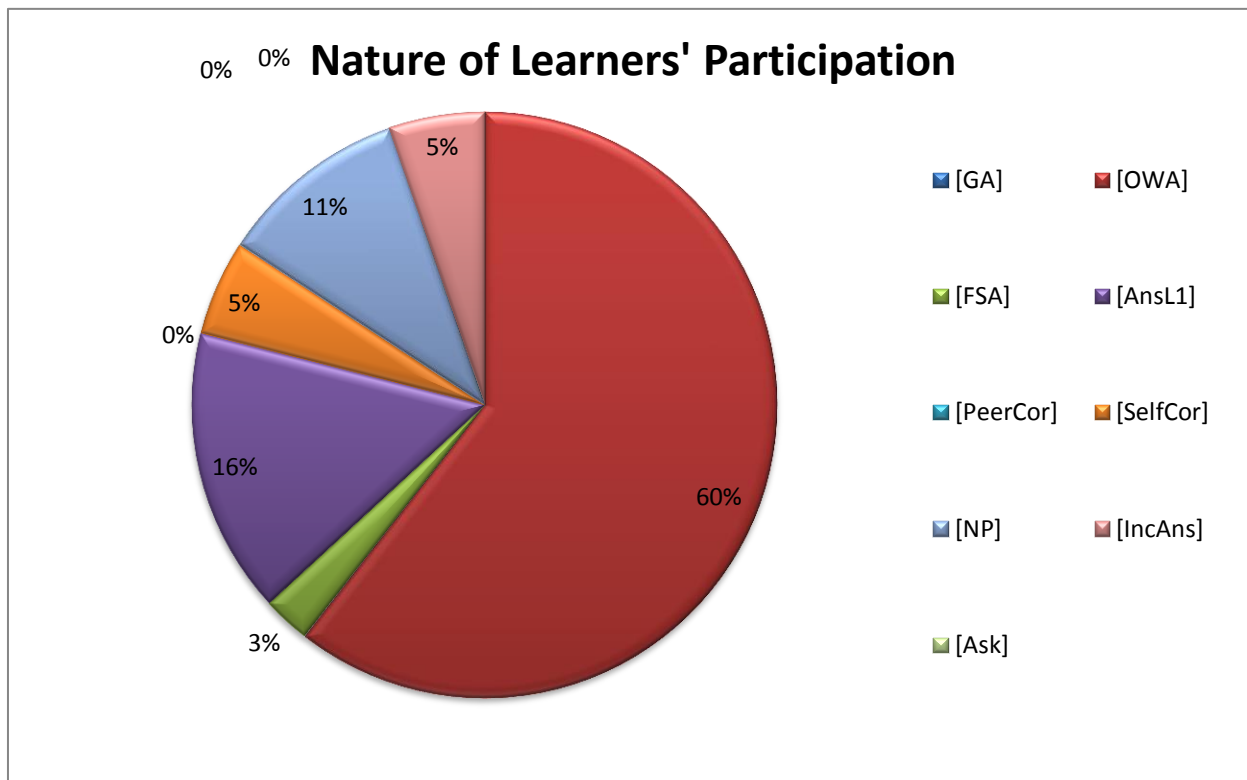


Figure 17 Lesson Script 1 Nature of Learners' Participation

### 1.2.1. Languages Used by the Teacher in Class

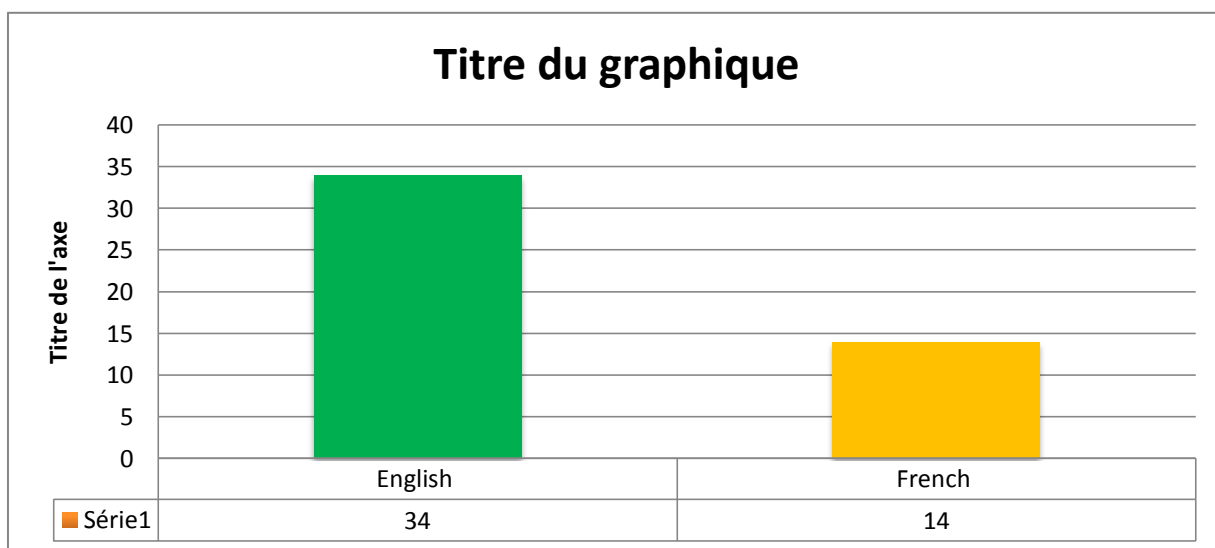


Figure 18 Lesson Script 2 Languages used by the teacher in class

### **1.2.2. Quantitative Results of Lesson 02**

The first graph shows a higher rate of teacher talk than learners, this means that the teacher in this class talked a lot more than learners. While the second graph shows sixty seven per cent of teacher talk consists of asking questions of students. Echoing students' participation as a form of feedback takes eleven per cent of teacher class talk. In comparison, the teacher only took thirteen per cent for lectures and explanations. As shown in the third graph most of teacher use the English language in class, yet in twenty one percent of the time the French language is used. In the fourth graph more than eleven percent of learners' talk consists of single words to answers to questions. Students utter incomplete noun phrases sixteen per cent of the time while. Only three per cent of student classroom language is conveyed in full English sentences and sixteen per cent utterances are produced in the students' first or second language.

**1.3. Class 03 [Lesson 3 Oil Shipping Catastrophe]**

**1.3.1. Number of Teacher and Students' Utterances -03-**

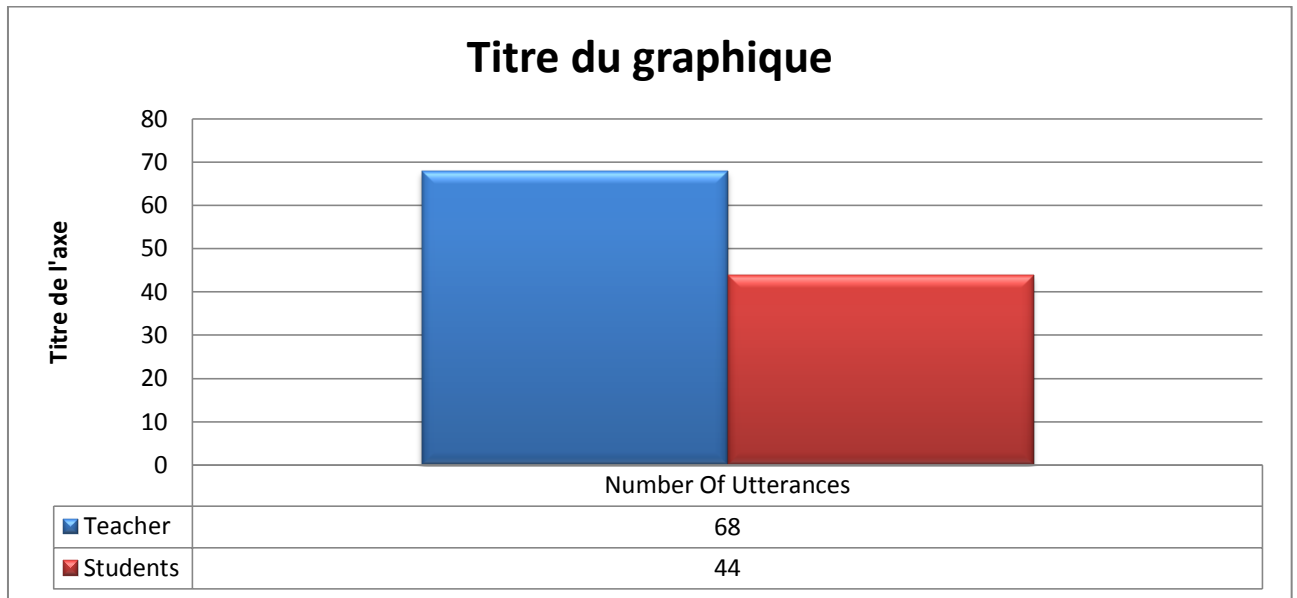


Figure 19 Transcript 3 Number of Teacher and Students' Utterances -03-

**1.3.2. Nature of Teacher's Discourse**

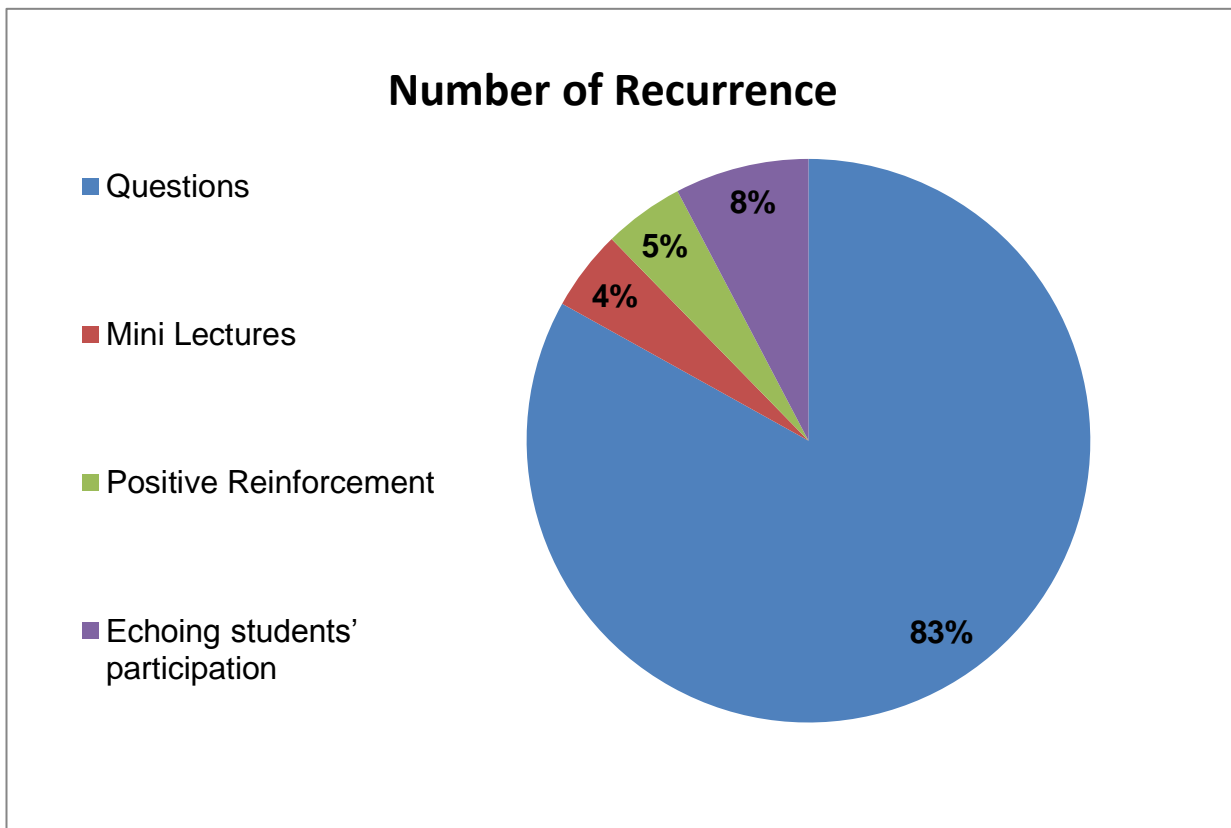


Figure 20 Languages used in class- Lesson 03

### 1.3.3. Nature of Students' Participation

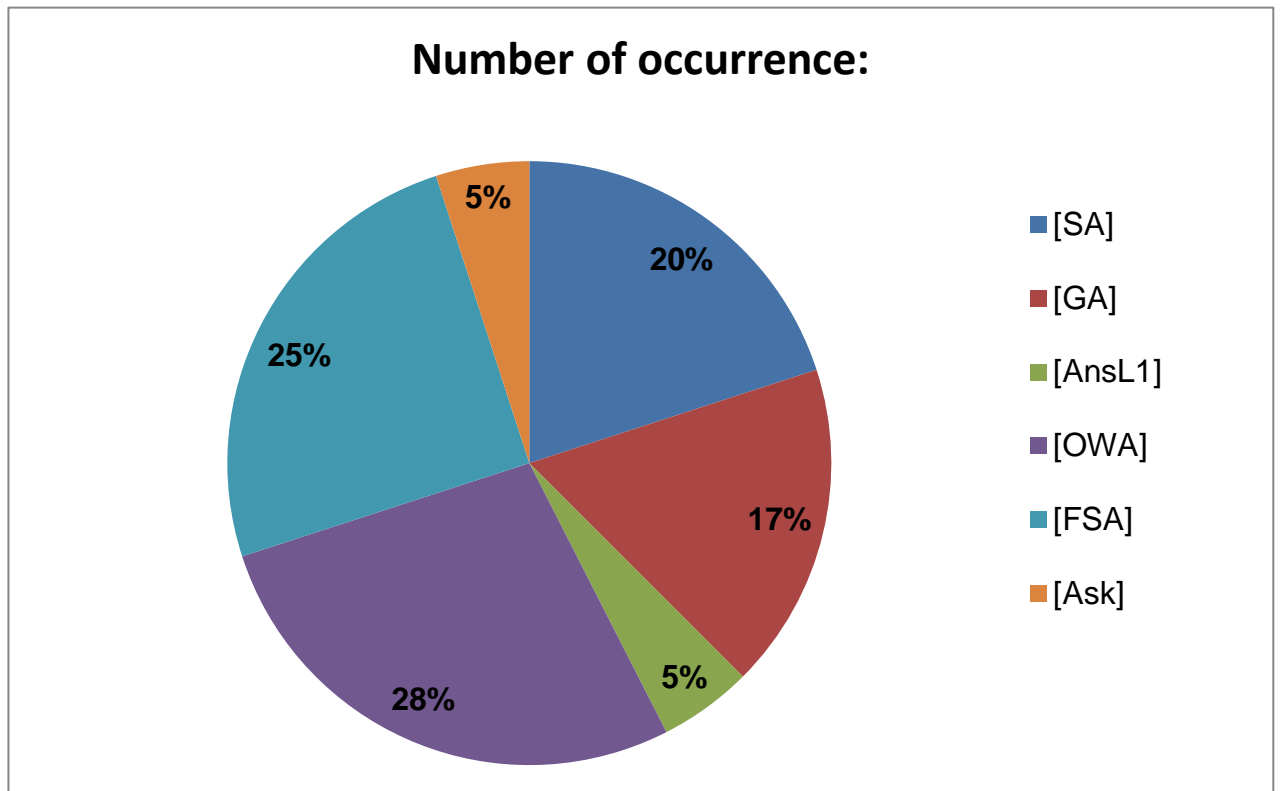


Figure 21 Transcript 3 Nature of Students' Participation

### 1.3.1. Languages Used in Class

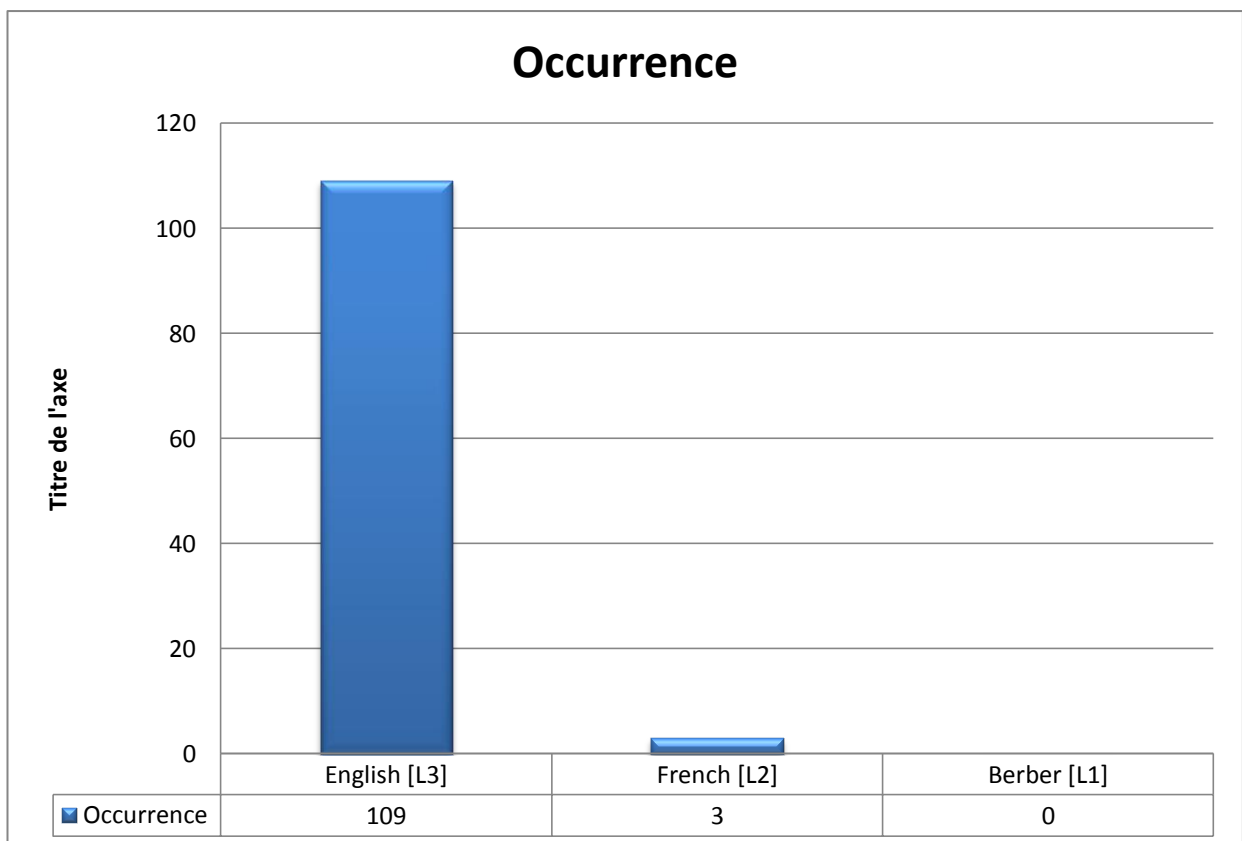


Figure 22 Transcript 3 Languages used in class

### **1.3.2. Quantitative Results Description- Lesson 03**

In the first graph, teacher's classroom discourse is superior in number of utterances to learners' classroom language by sixty eight to forty-eight percent. The teacher spoke almost exclusively in English to the exception of rare occasions where French was used. Eighty three per cent of teacher classroom language was spent on asking questions, Twelve per cent for providing feedback. Explanations and lectures took only four per cent of teacher talk.

In the first graph, teacher's classroom discourse is superior in number of utterances to learners' classroom language by sixty eight to forty-eight percent. The teacher spoke almost exclusively in English to the exception of rare occasions where French was used. Eighty three per cent of teacher classroom language was spent on asking questions, Twelve per cent for providing feedback. Explanations and lectures took only four per cent of teacher talk.

**1.4. Class 04 [Lesson Causes and Effects of Changing Eating Habits]**

**1.4.1. Number of Teacher and Students' Utterances -04-**

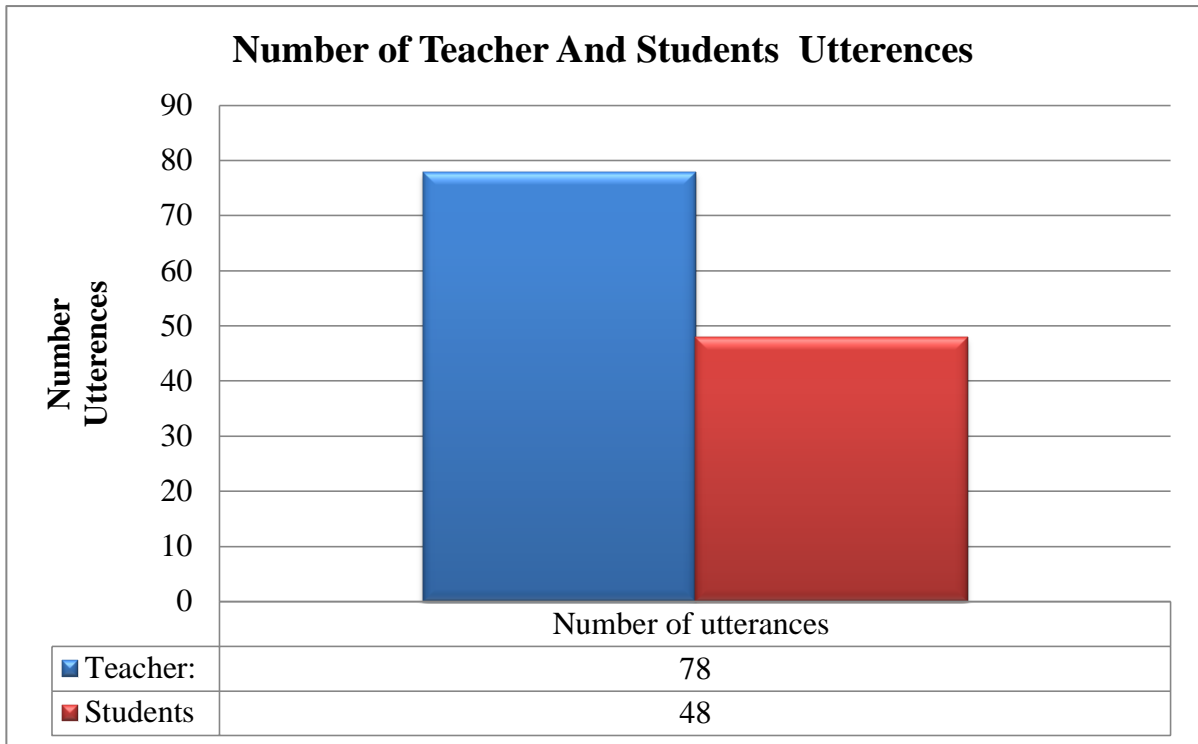


Figure 23 Lesson Script 4 Number of Teacher's and Students' Utterances

**1.4.2. Nature of teacher's discourse**

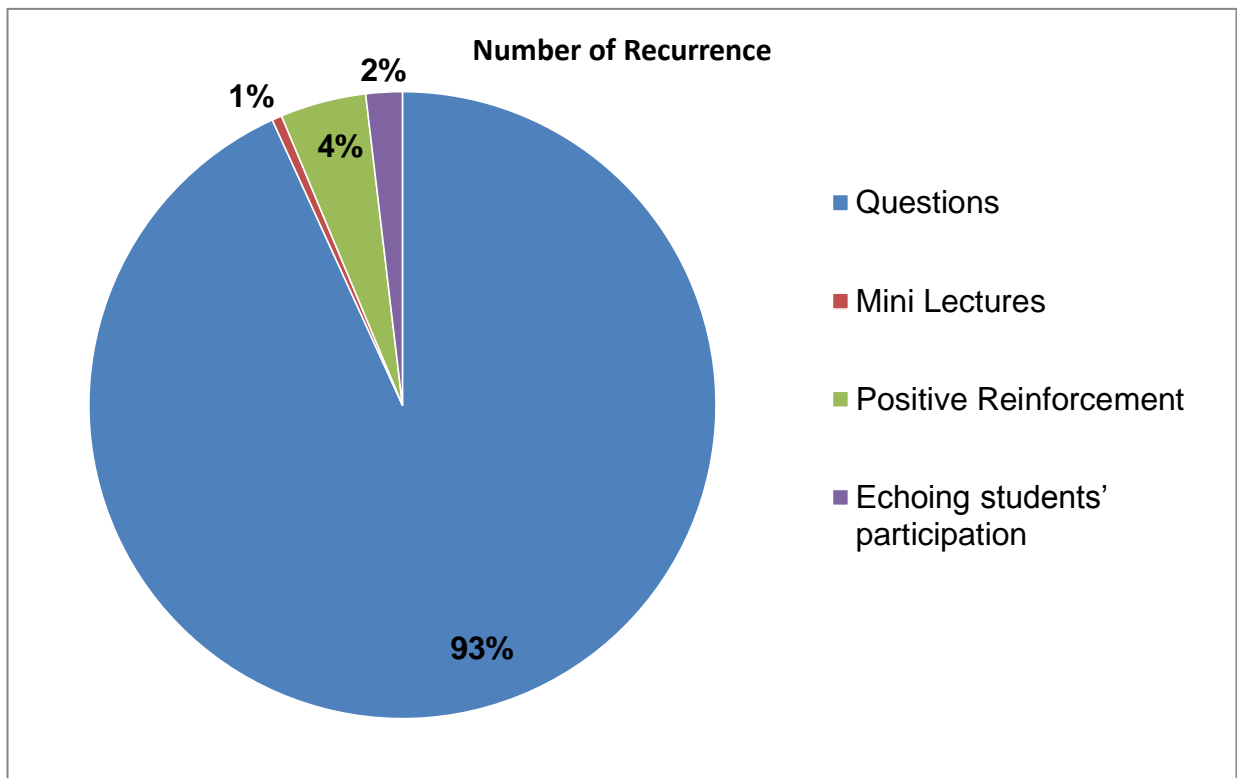


Figure 24 Transcript 4 Nature of teacher's discourse

### 1.4.3. Nature of Students' Participation

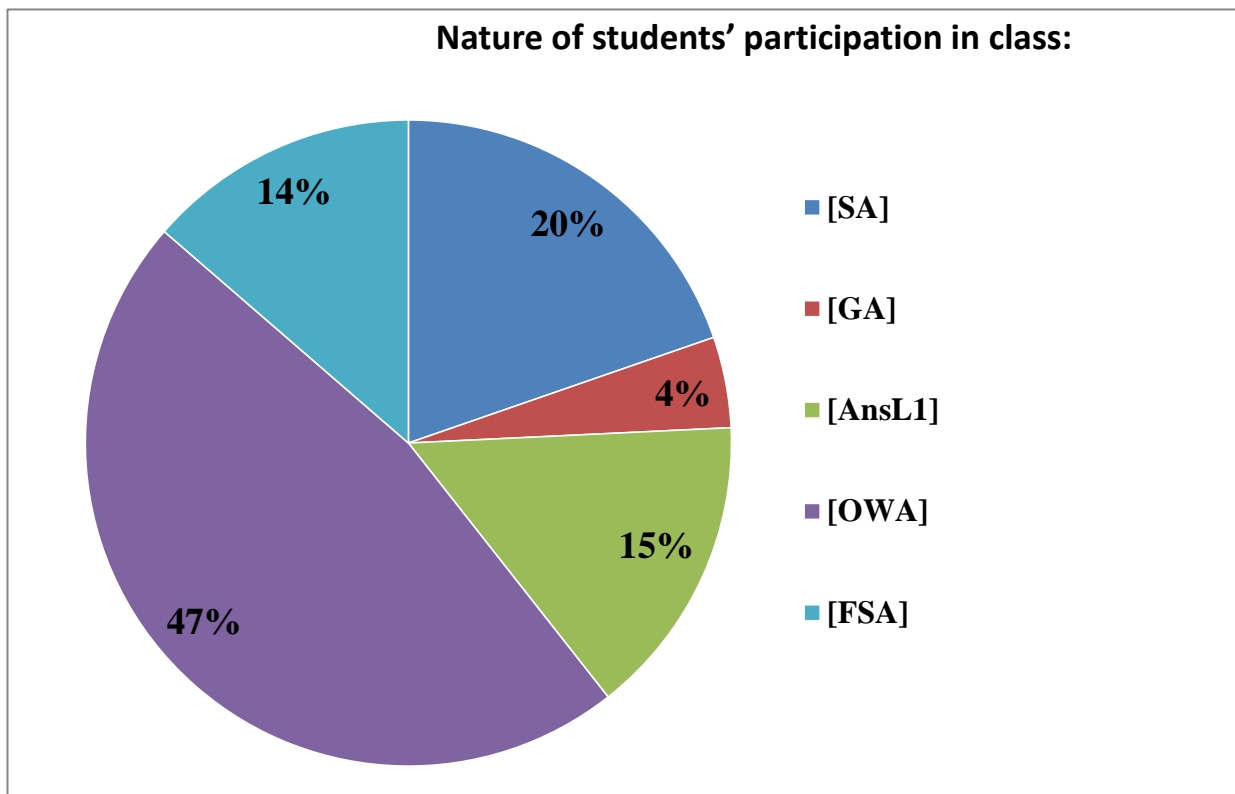


Figure 25 Transcript 4 Nature of students' participation

### 1.4.4. Quantitative Results Description- Lesson 04

The first graph reveals that the teacher talked much more than students in this lesson. The teacher took more than half classroom talk time with more than seventy utterances. In comparison students uttered only forty eight utterances during the whole lesson. The vast majority of the teacher classroom talk was dedicated to question asking and trying to elicit answers from learners, however, only six per cent of teacher talk was spent on providing feedback.

In the fourth graph, the numbers reveal that twenty percent of the time, students remain silent when asked a question. In other instances they give a nod of confirmation or an inquisitive look. Indeed, four percent of students' communications are gestures. Seventy per cent of the time, students use a single word as a response to the teacher's question. Students are also inclined to use their first or second language in class. Fifteen percent of students' total talk time occurs in colloquial Arabic or Berber, which are the first language of most students in the region of Tizi-Ouzou.

**1.5. Class 5 [Grammar Lesson Question Intonation]**

**1.5.1. Number of Teacher and Students' Utterances -05-**

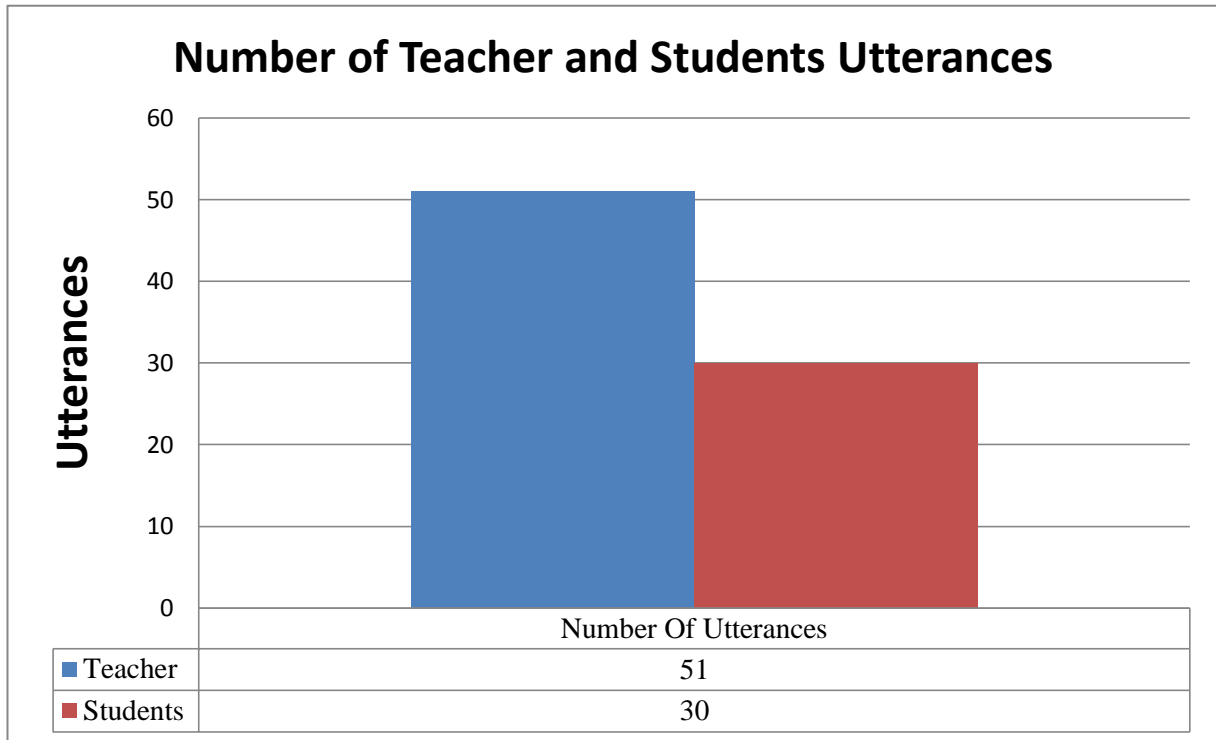


Figure 26 Lesson Script 5 Number of Teacher's and Students' Utterances

**1.5.2. Nature of Teacher's Discourse**

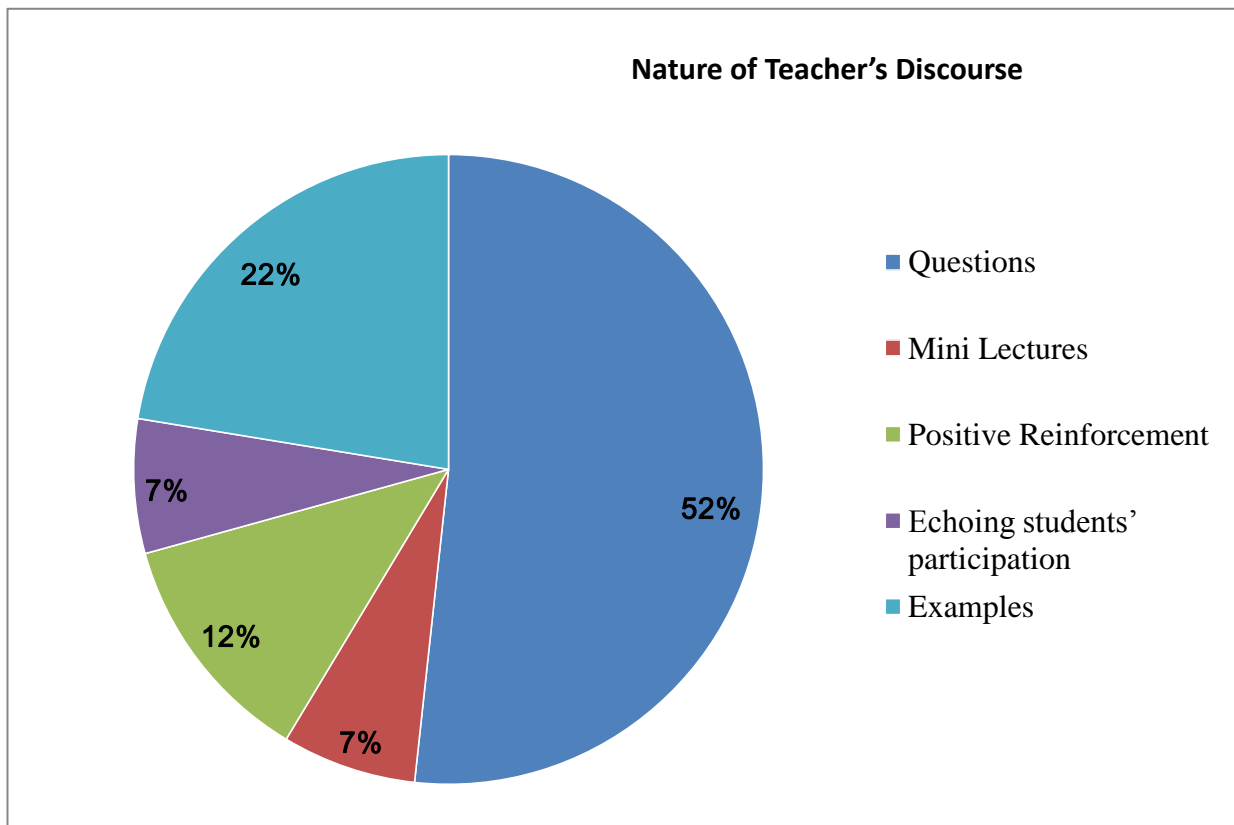


Figure 27 Transcript 5 Nature of Teacher's Discourse

### 1.5.3. Nature of student participation

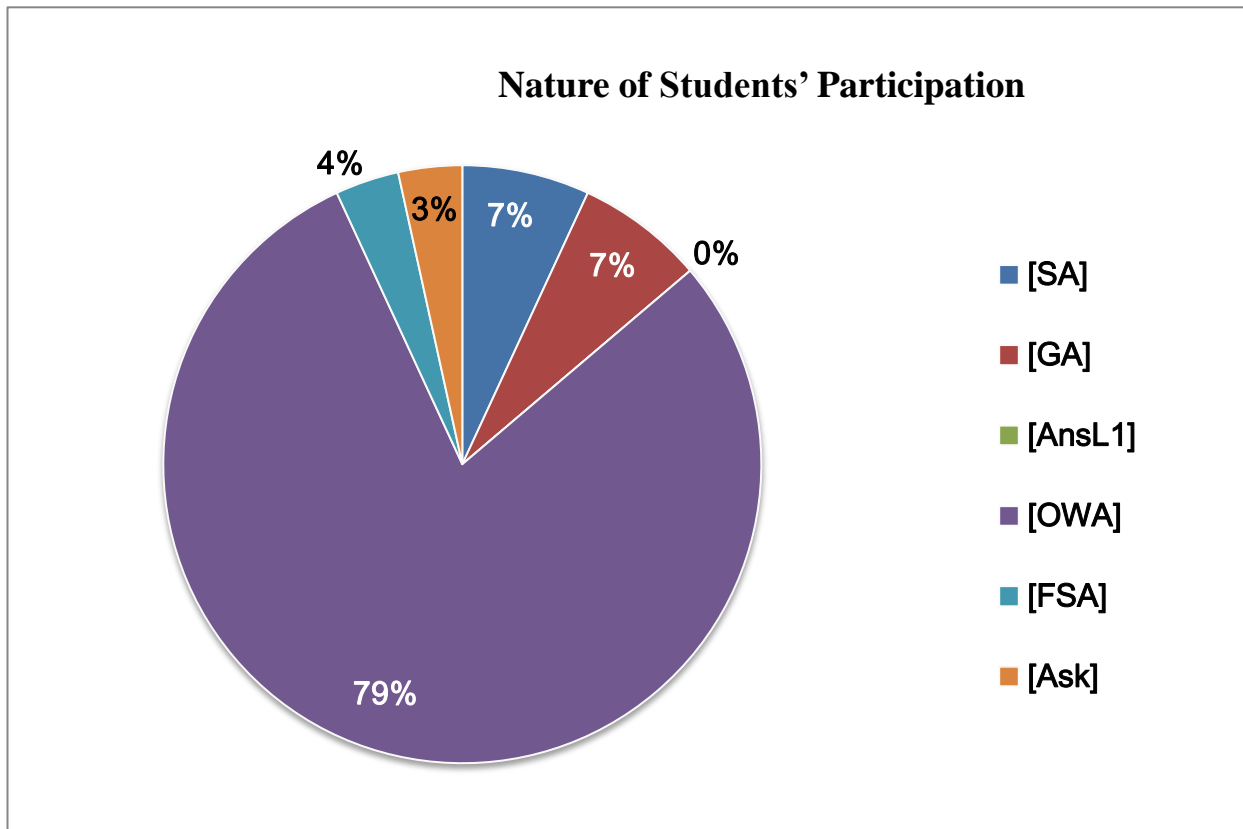


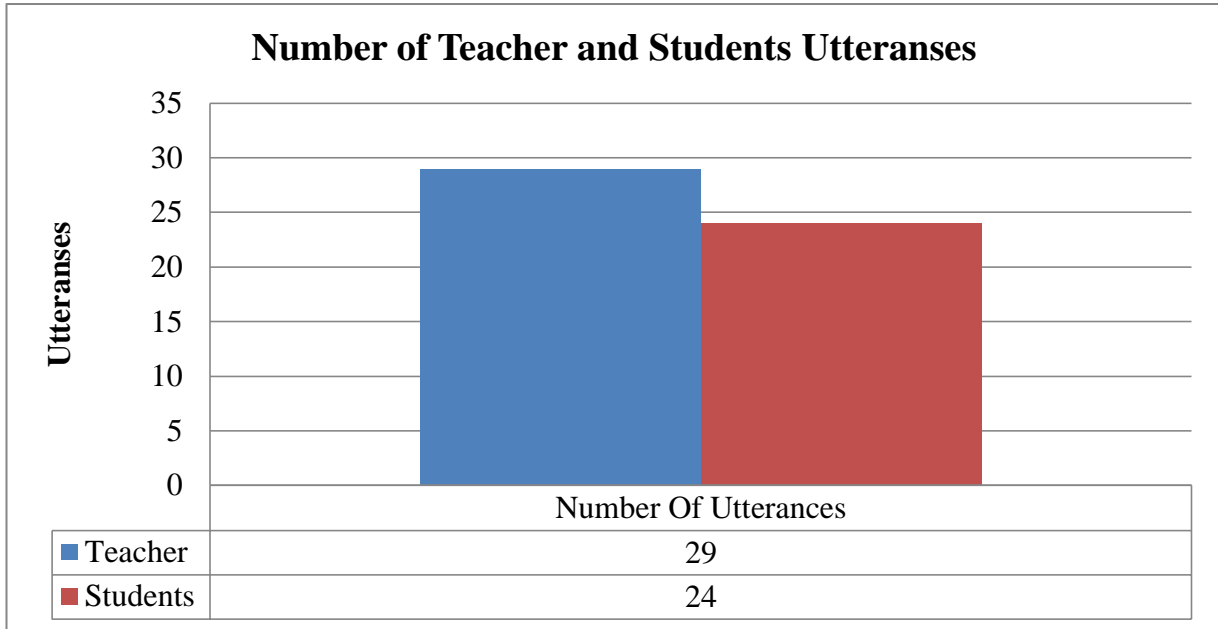
Figure 28 Transcript 5 Nature of student participation

### 1.5.4. Quantitative Results Description- Lesson 05

The first and second graphs show that the teacher produced more utterances than learners. Half of the teacher's utterances are questions, twenty two percent of them are examples, and seven per cent of them are spent on mini-lectures, while the remaining nineteen per cent are left for feedback. Students' classroom language consisted in its majority in short answers to questions. The third graph shows that seventy nine percent of learners' utterances are single words and only four per cent of them are full sentences used as answers to questions and three per cent are questions for the teacher.

**1.6. Class 06 [Writing Lesson Writing Right Charter ]**

**1.6.1. Number of Teacher and Students' Utterances -06-**



Transcript 6 Lesson Number of Teacher and Students' Utterances -06-

**1.6.2. Nature of Teacher's Discourse**

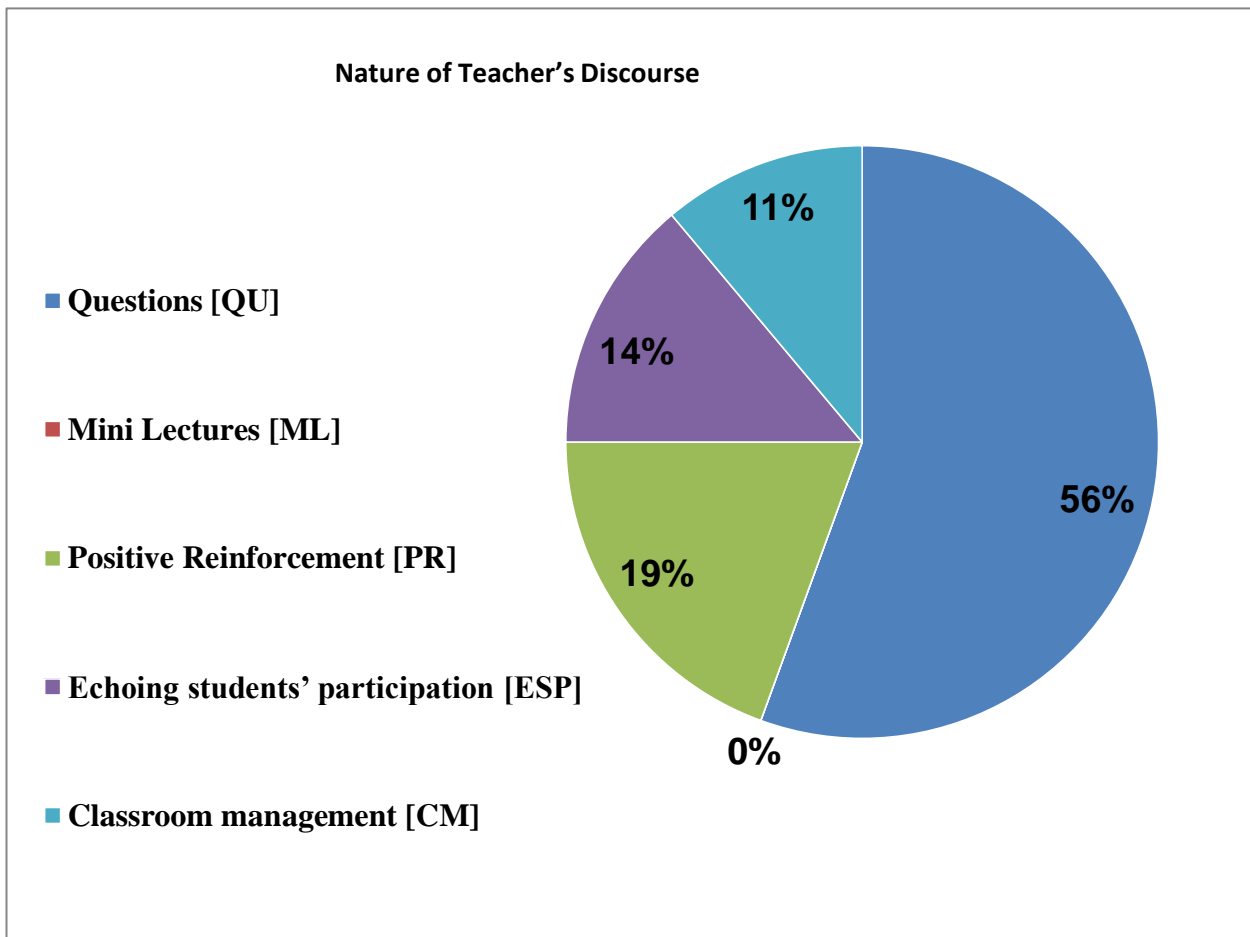


Figure 30 Transcript 6 Teacher's Discourse

### 1.6.3. Nature of Students' Participation

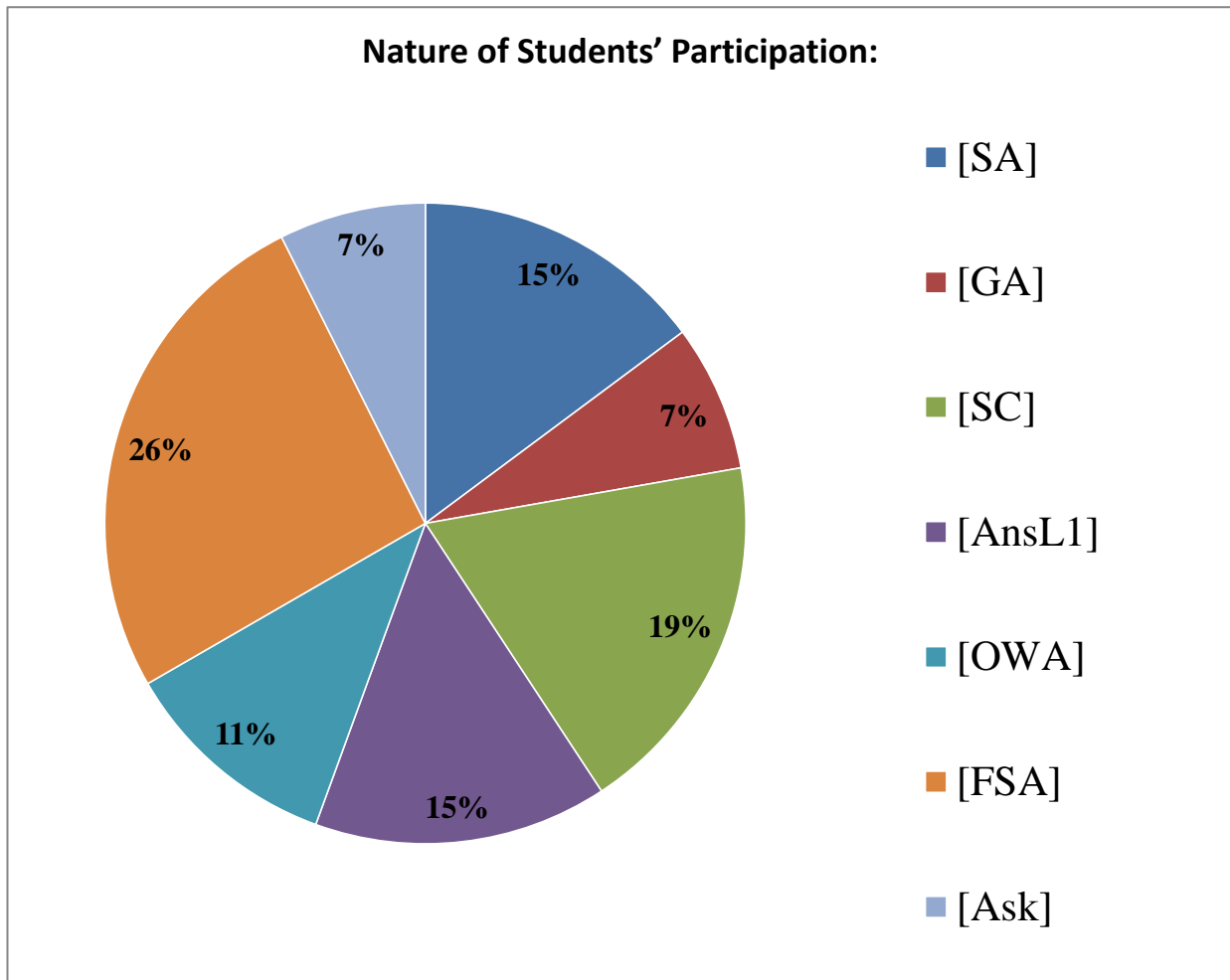


Figure 31 Transcript 6 Lesson Script Nature of Students' Participation

### 1.6.3 Languages Used in Class

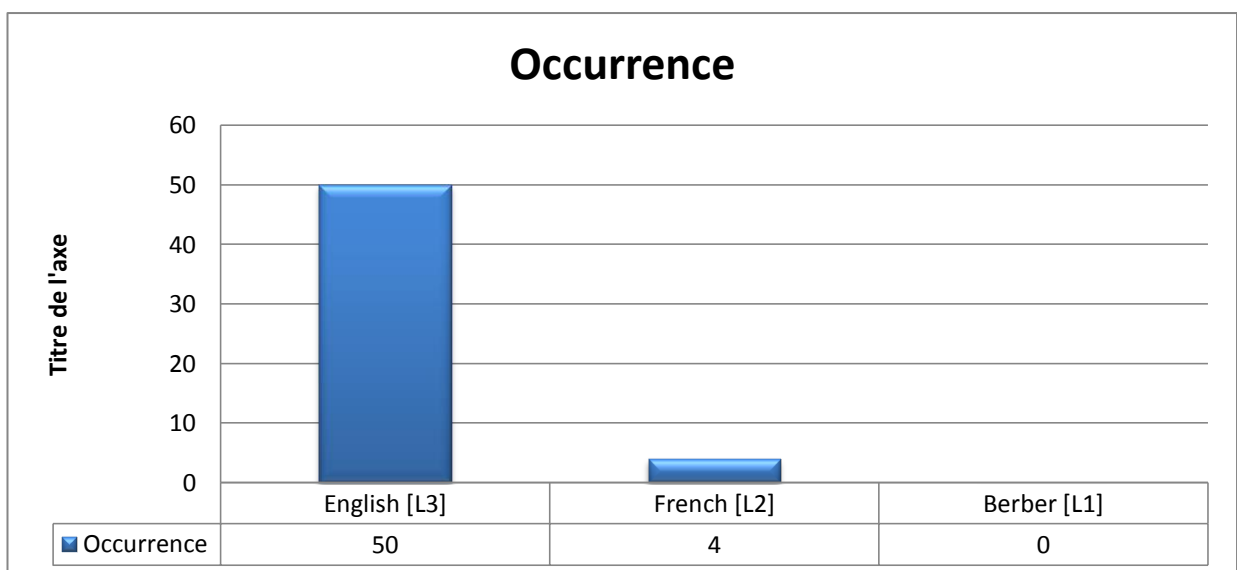


Figure 32 Transcript 6 Lesson Languages Used in Class

#### **1.6.4 .Quantitative Results Description- Lesson 06**

This class was intended as a practical lesson to revise how to express obligation and prohibition. Students spent half of the class period in individual work activities. The exchanged interaction contained only fifty five utterances, seven percent of which were produced in French. The teacher spent fifty six percent of her utterances asking questions, nineteen percent in positive reinforcement and eleven per cent in classroom management.

Students produced more complete sentences than independent clauses and single word answers. Twenty six per cent of students' utterances were full sentences, nineteen per cent in independent causes and only eleven percent of one word answers. These results show that students were more comfortable communicating in the target language this is illustrated by their courageous attempts to produce complete sentences, even if they may make more errors by doing so. Students, however, used fifteen per cent of utterances in their first and second languages. They also uttered seven per cent of the questions.

**1.7. Class 07 [Reading Comprehension- Lesson 7 Pollution and Global Warming]**

**1.7.1. Number of Teacher and Students' Utterances -07-**

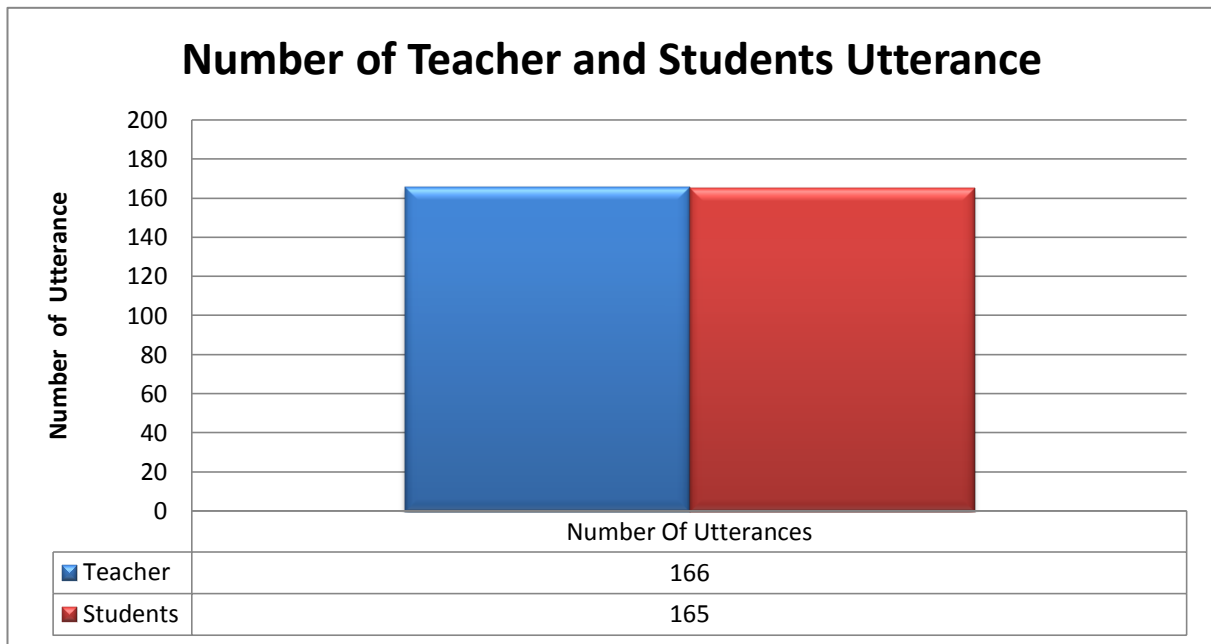


Figure 33 Transcript 7 Number of Teacher and Students' Utterances -07-

**1.7.2. Nature of Teacher's Discourse**

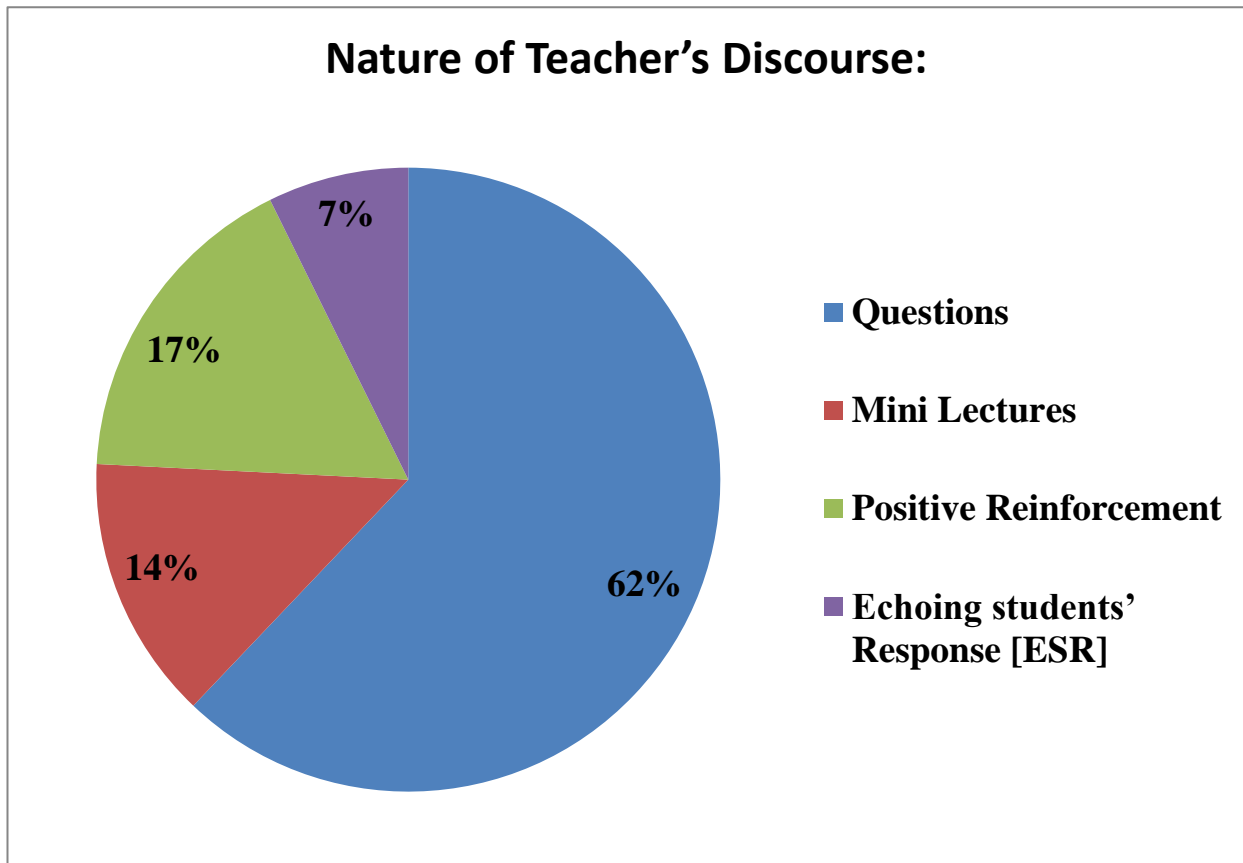


Figure 34 Transcript 7 Nature of Teacher's Discourse

### 1.7.3. Nature of Students' Participation

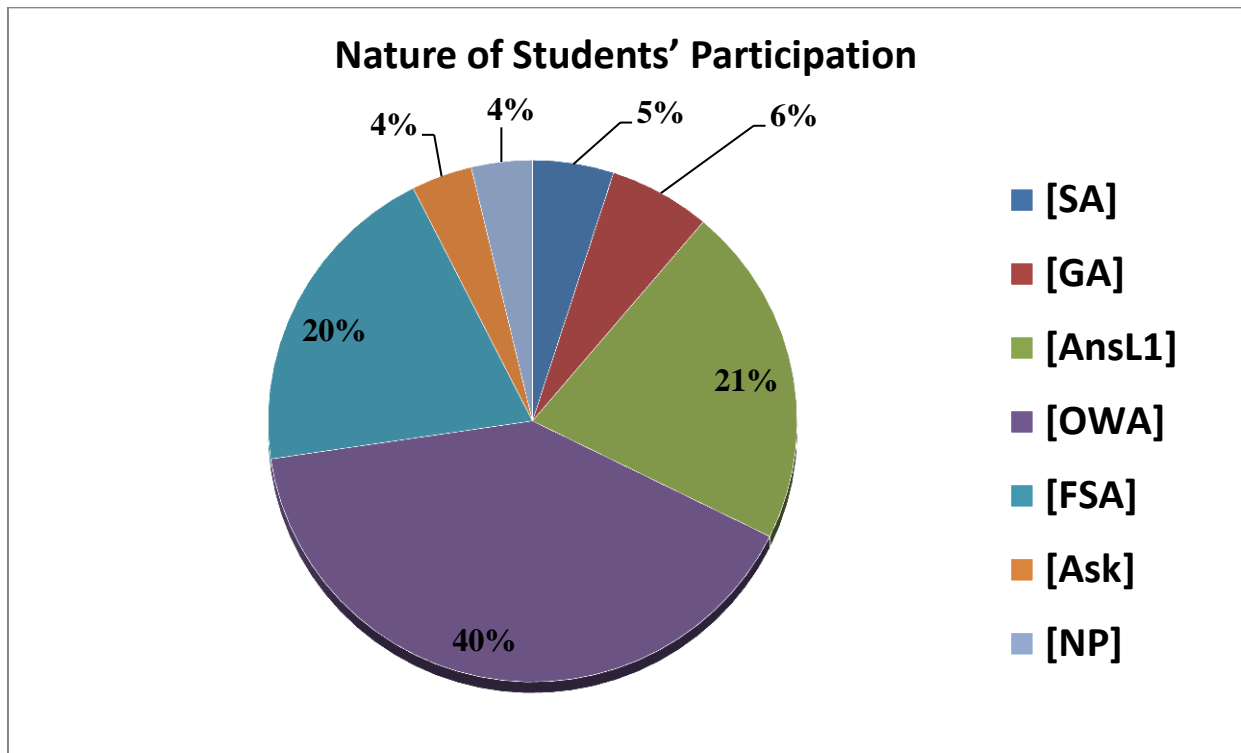


Figure 35 Transcript 7 Nature of Students' Participation

### 1.3.1. Languages Used in Class

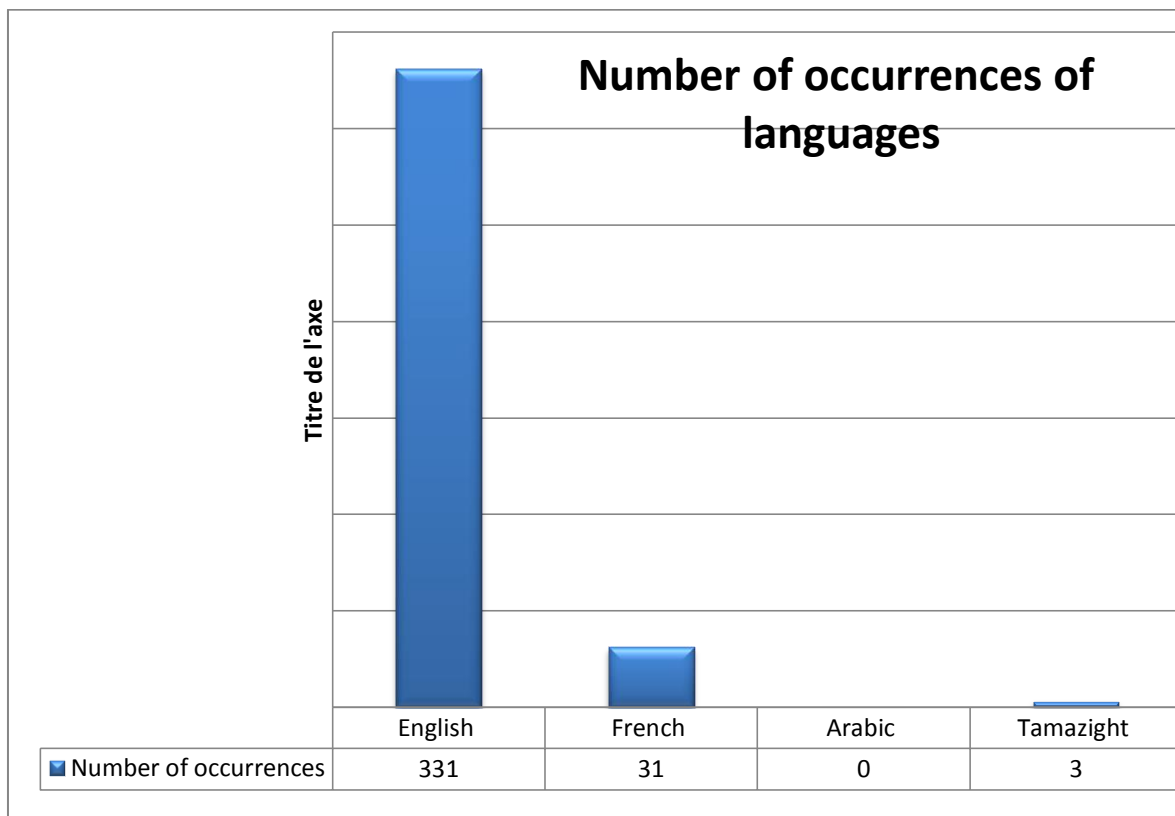


Figure 36 Transcript 7 Languages Used in Class

### 1.3.2. **Quantitative Results Description- Lesson 07**

It is revealed from the results that classroom talk time in lesson seven was divided equally between the teacher and the learners. Three languages were used unequally by the interlocutors. Only one percent of Tamazight and eight percent of French were used in contrast to ninety one of English. In the third graph, the teacher spent more than half her talk time asking questions. The other half of teacher talk was divided into fourteen percent for lecturing, seventeen percent for positive reinforcement and encouragements and seven percent were used for echoing learners' responses as a form of feedback. Students' responses to teacher utterances varied significantly. In forty percent of the time learners responded with single words. They also asked some questions. In addition, full sentences in the second language of students and the target language were used in equal percentages twenty percent, while non-verbal responses were used in smaller percentages six percent of expressive gesture against four percent of silence responses.

**1.8. Class 08 [Grammar Lesson 8 Expressing Regrets and Wishes]**

**1.8.1. Number of Teacher and Students' Utterances -08-**

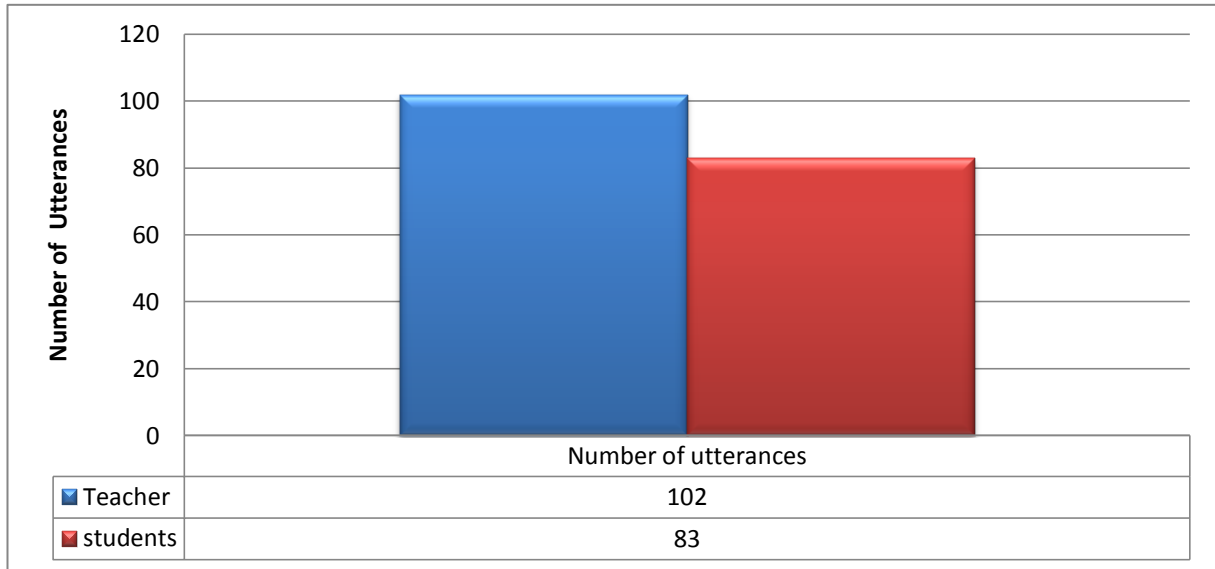


Figure 37 Transcript 8 Number of Teacher and Students Utterances -08

**1.8.2. Nature of Teacher's Discourse**

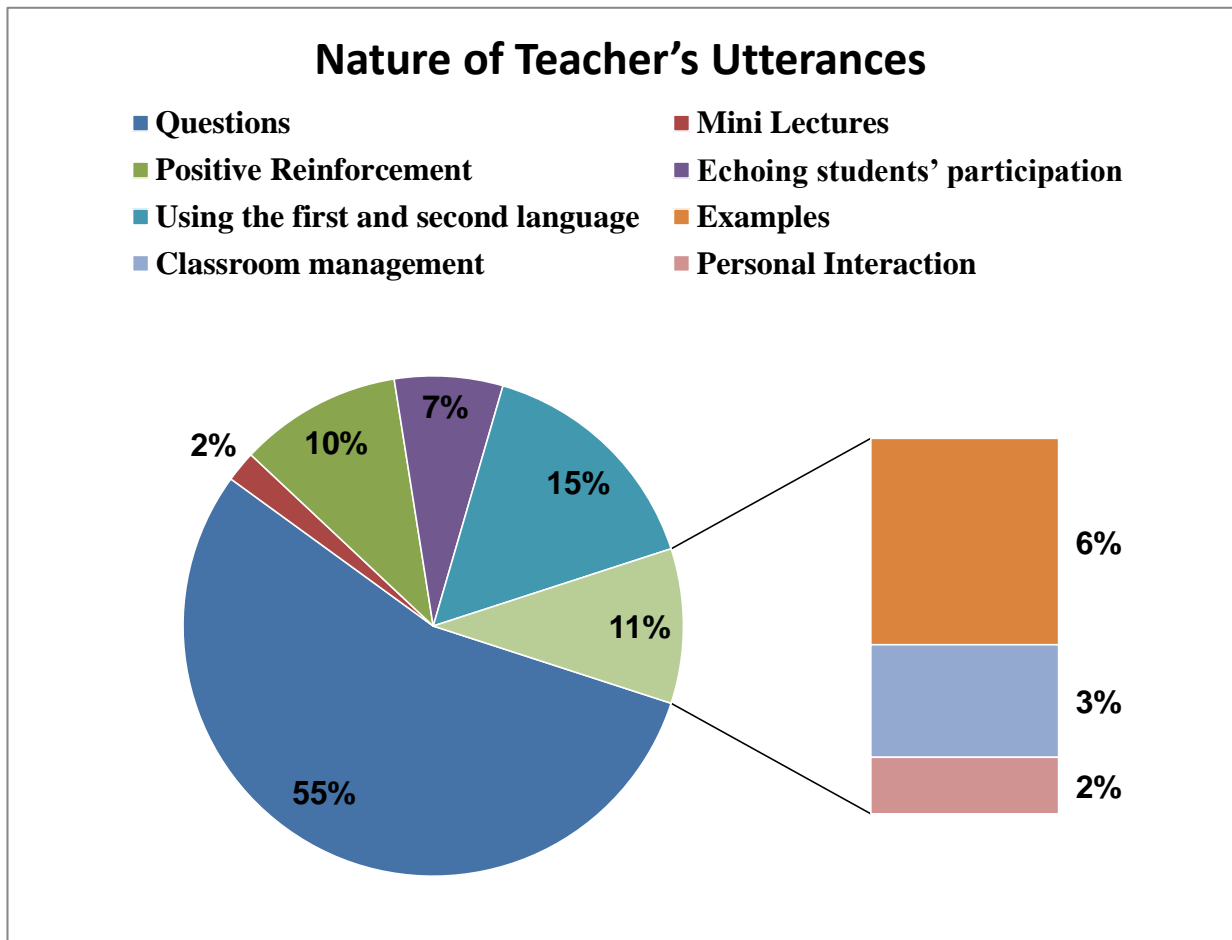


Figure 38 Transcript 8 of Teacher's Discourse

### 1.8.3. Nature of Students' Participation

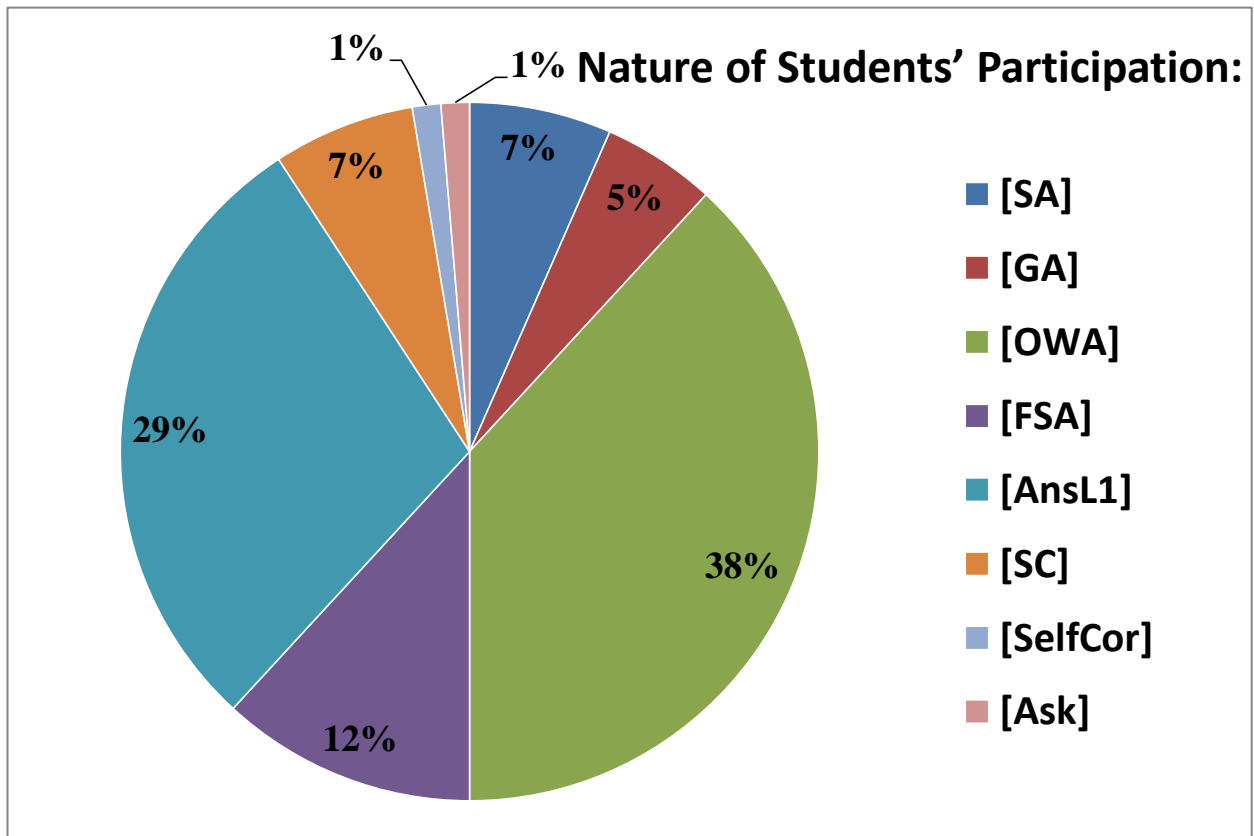


Figure 39 Transcript 8 Students' Participation

### 1.3.1. Languages Used in Class

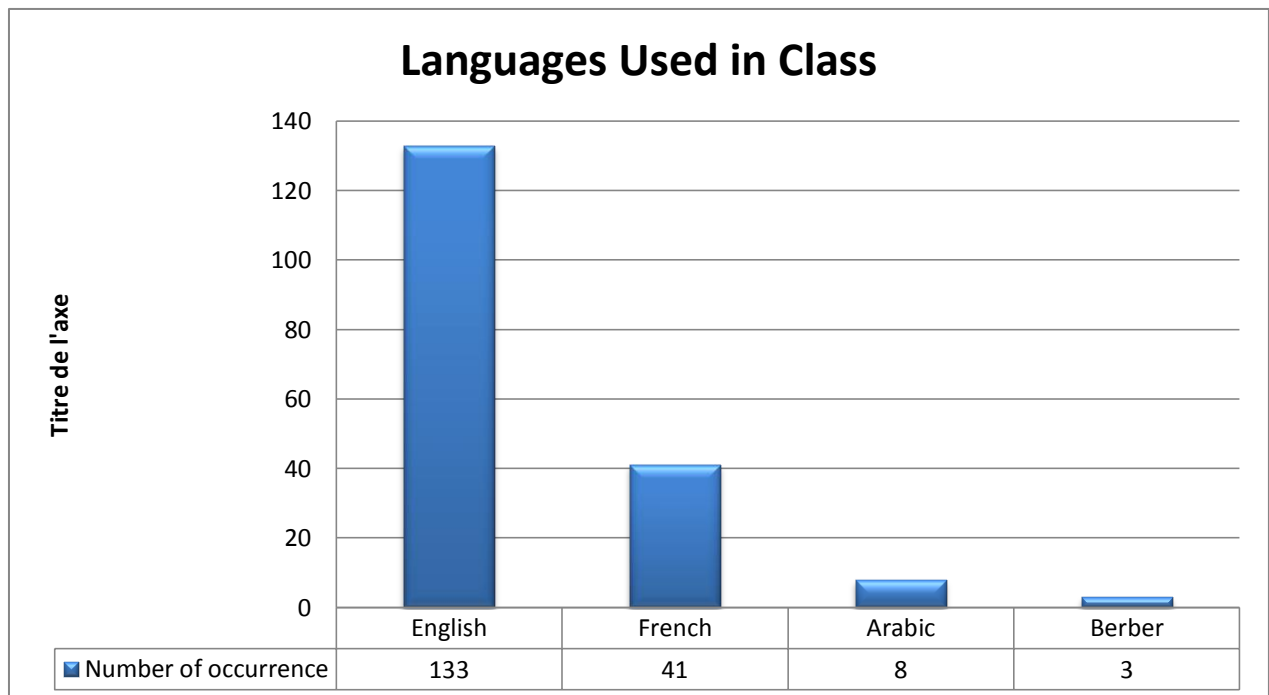


Figure 40 Transcript 8 Languages Used in Class

### **1.3.2. Quantitative Results Description- Lesson 08**

In this class the teacher produced around one hundred and two utterances, half of which consisted in asking questions and eliciting answers from students. Ten percent of them were uttered for positive reinforcement and fifteen percent is uttered in the first and second languages of students, while twenty nine percent of students' utterances were uttered in one or more of their native languages, four percent in colloquial Arabic and only two percent in Berber. French was also used in twenty two percent of student talk. The third graph shows an interesting contrast between the percentages of lecturing and examples which does not exceed two percent of teacher's talk against six percent of providing examples. The third graph shows an interesting contrast between the percentages of lecturing and examples which doesn't exceed two percent of the teacher's talk against six percent of providing examples. The last graph demonstrates the variety of students' responses in class. When asked questions, learners answered, mostly in fragments of sentences thirty-eight percent of which were one-word answers and seven percent of subordinate clauses. However, they managed twelve percent of full correct sentences. But when learners couldn't answer they resorted to silence in seven percent of the time.

**1.9. Class 09 [Grammar Lesson The Passive Voice]**

**1.9.1. Number of Teacher and Students' Utterances -08-**

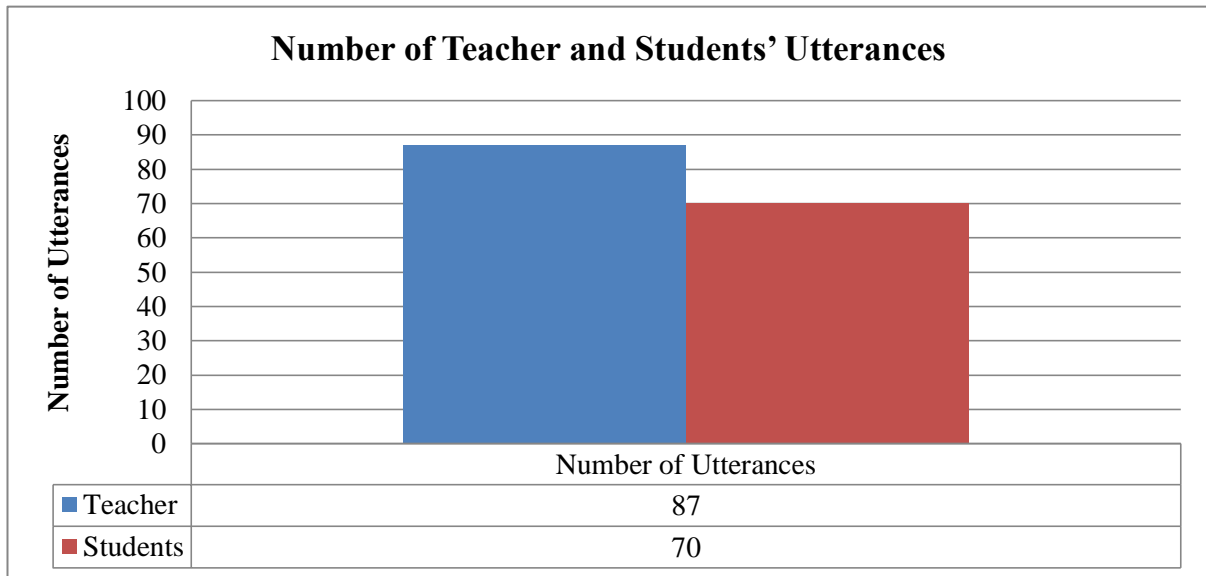


Figure 41 Lesson Script 9 Number of Teacher's and Students' Utterances

**1.9.2. Nature of Teacher's Discourse**

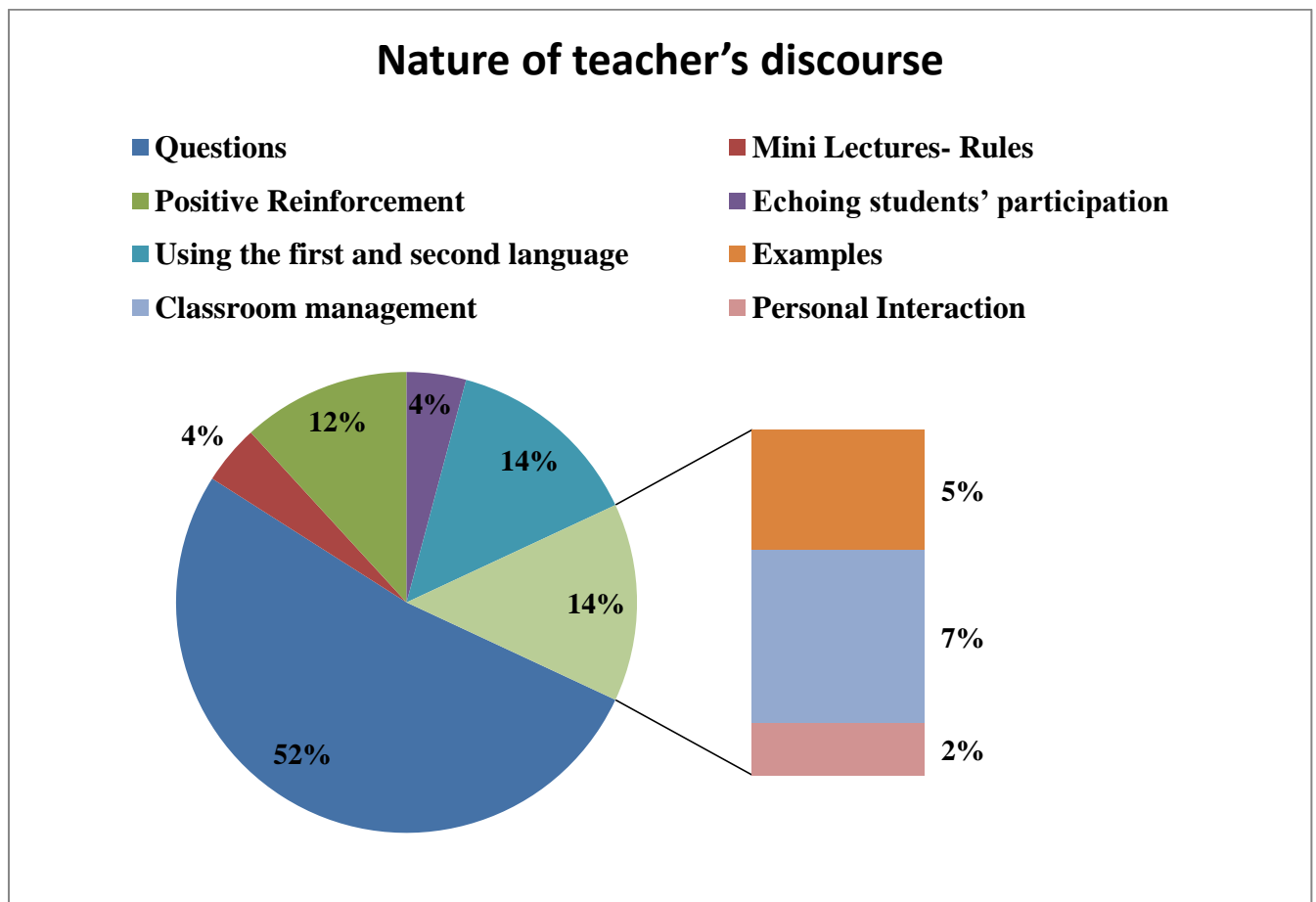


Figure 42 Transcript 9 Nature of teacher's discourse

### 1.9.3. Nature of Students' Participation

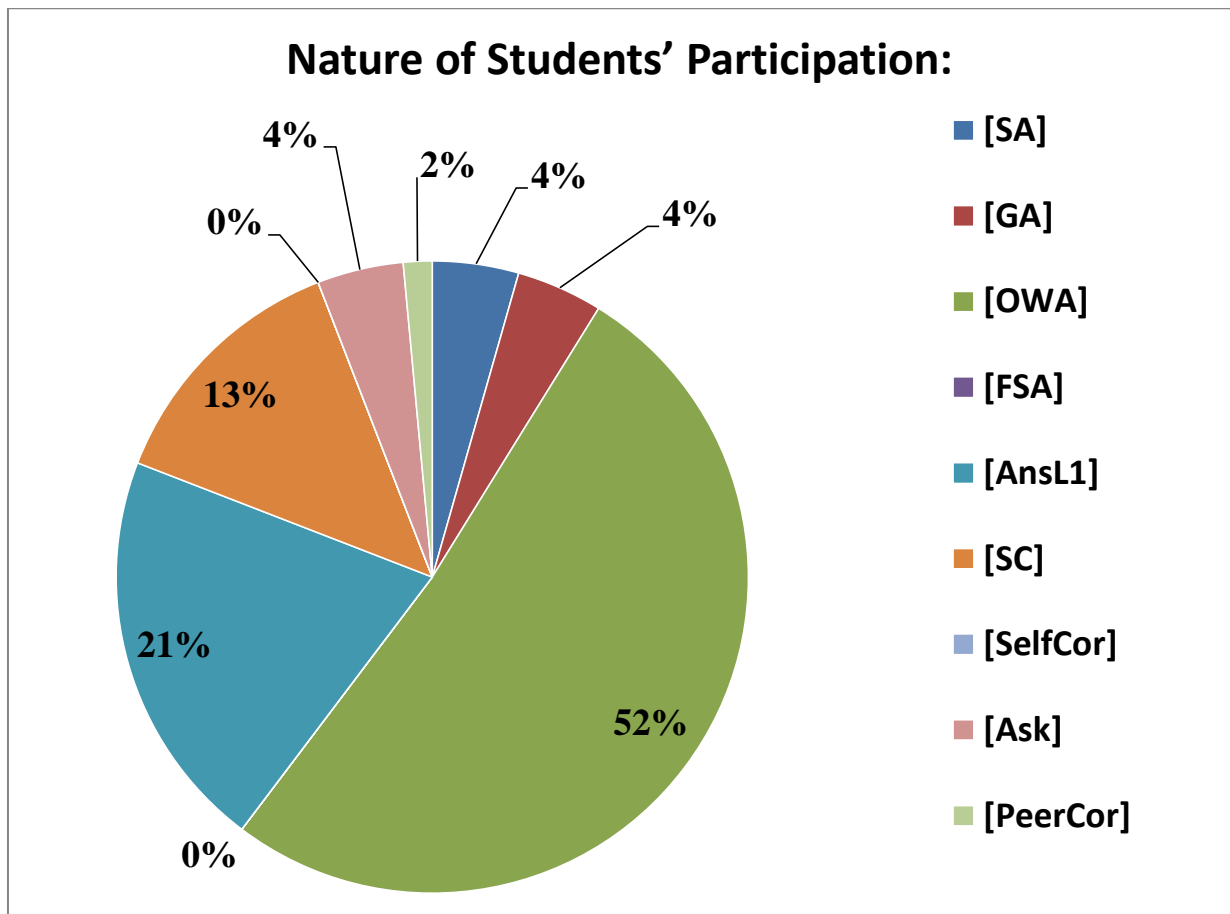


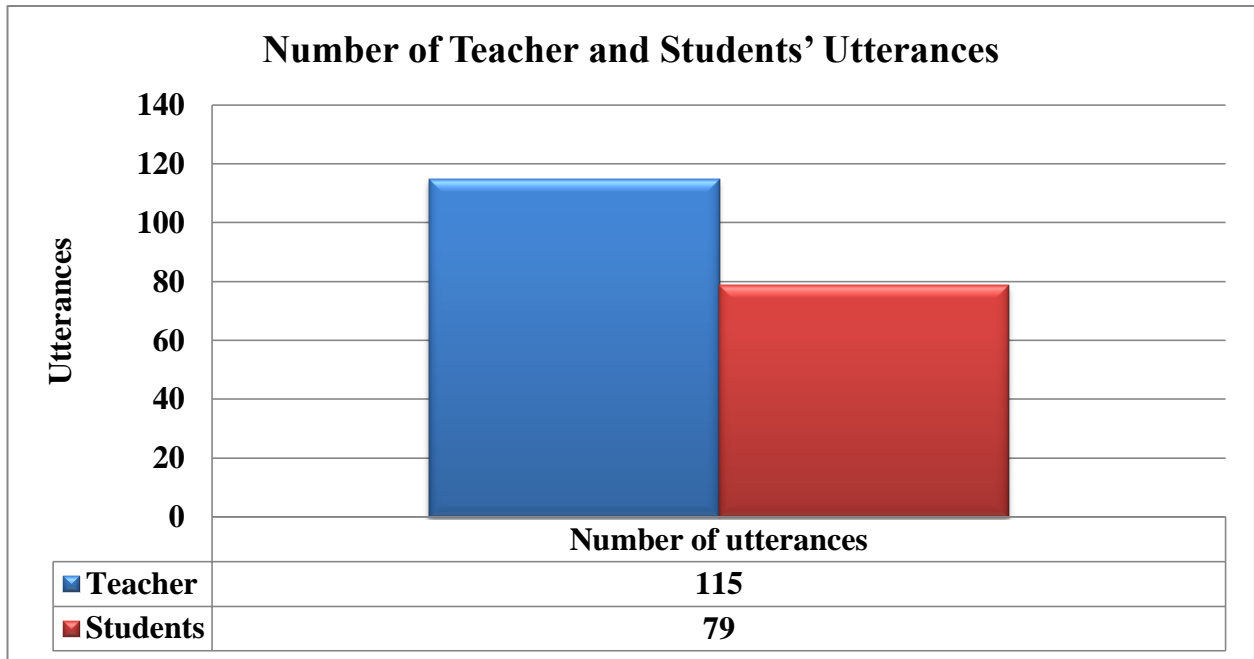
Figure 43 Transcript 9 Nature of Students' Participation

### 1.9.4. Quantitative Results Description- Lesson 09

In The first graph the teacher used more utterances than students, fifty of them were questions, and twelve percent was used in feedback and positive reinforcement. On the one hand, fourteen percent of the teacher's talk was uttered in their first and second languages. On the other hand, learners produced up to seventy utterances in English and only fourteen percent in their first and second languages. The second graph demonstrated that the teacher preferred positive reinforcement and classroom management with seventeen, and ten percent respectively to lecturing and providing examples which only took six and seven percent of their class talk. All of the students' classroom talk consists in fragmented sentences. Half of students' responses to direct questions were single words. Students produced thirteen percent of subordinate clauses. However, they did ask about four percent of questions in English.

**1.10. Class 10 [Pre- reading Comprehension Slave Trade]**

**1.10.1. Number of Teacher and Students' Utterances lesson 10**



Transcript 10 Number of Teacher and Students' Utterances lesson 10

**1.10.2. Nature of teacher's discourse**

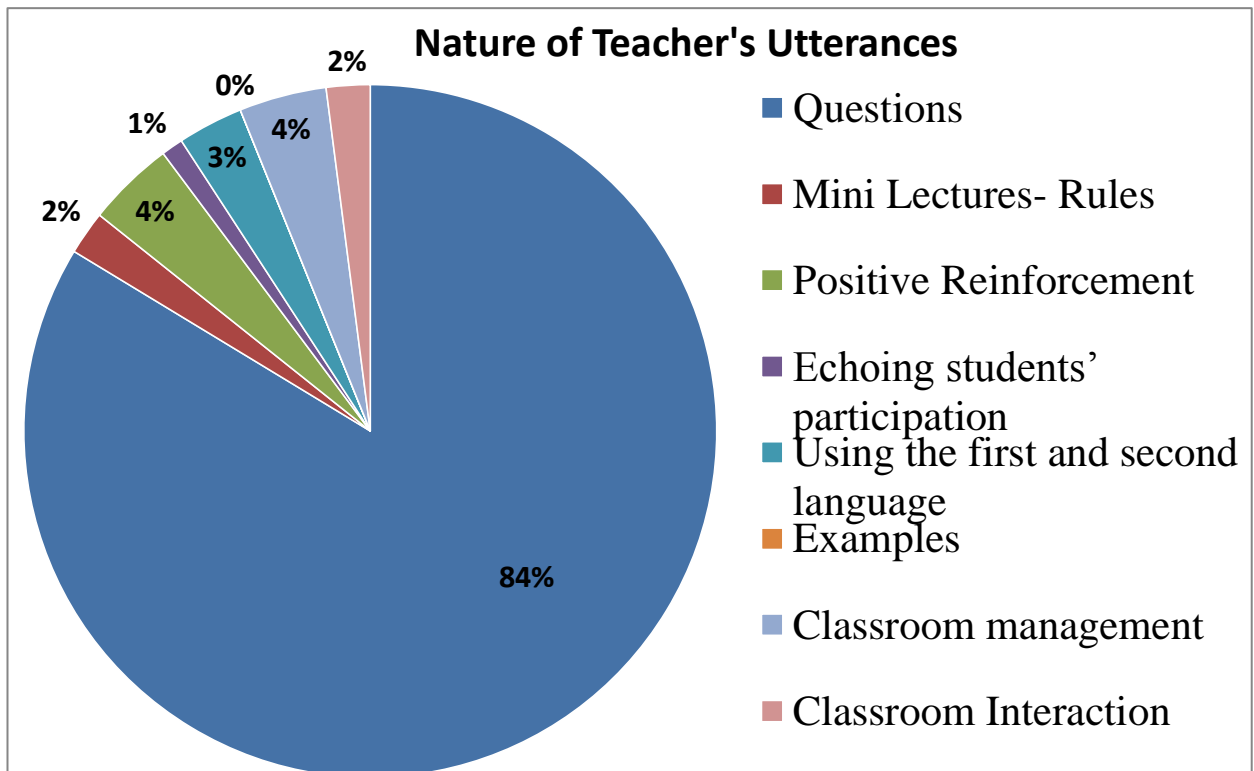


Figure 45 Nature of Teacher's Discourse

### 1.10.3. Nature of Students' Participation

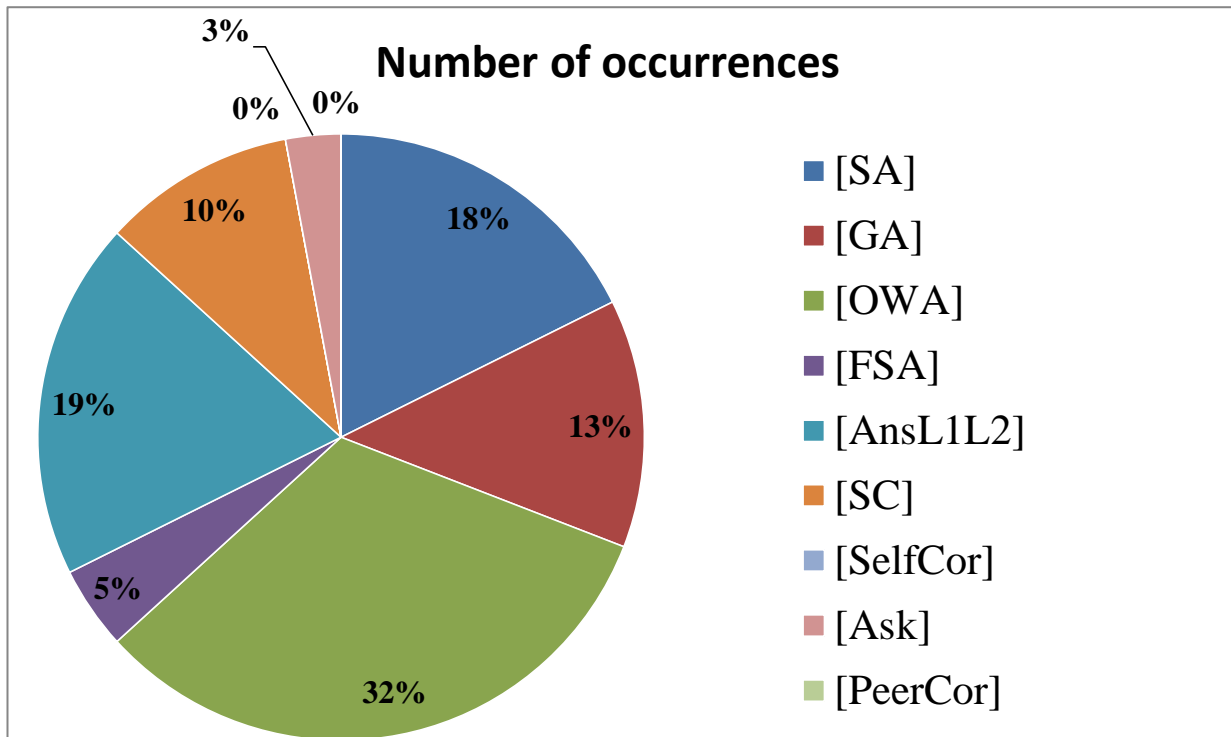


Figure 46 Transcript 10 Nature of Students' Participation

### 1.3.1. Languages Used in Class

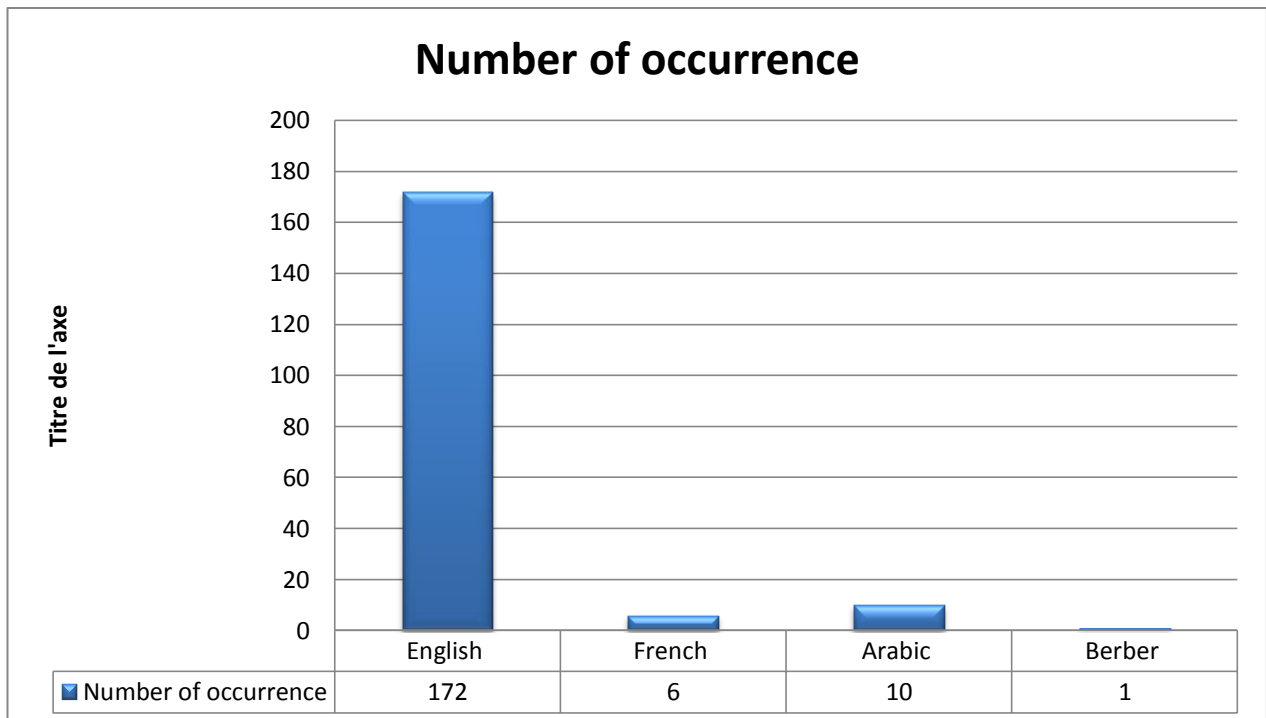


Figure 47 Transcript 10 Languages Used in Class

#### **1.10.4. Quantitative Results Description Lesson 10**

The first graph shows that teacher talked more than students. However, her intention to make learners talk more in English is demonstrated in the number of her interrogations. Indeed, two thirds of teacher's utterances were questions, and ninety-one percent of them were produced in English, but the teacher used French, Tamazight and Arabic in a small percentage. The students' participation in class is expressed in more homogeneous patterns, with eighteen percent of silent reactions, nineteen percent of interventions in the first language, thirteen percent of gestures. Students expressed themselves in English using parts of sentences, thirty two percent of their utterances consisted in single words, ten percent of subordinate clauses in contrast with only five percent of complete sentences and three percent of questions.

### 1.11. Conclusions of the quantitative result analysis

The quantitative analysis of the data demonstrates that teachers valued interaction with students. They spent most of their talk time asking questions for the whole class or for individual students. This shows their willingness to offer learners time to speak in class and ensuring that learners have sufficient time practicing the English language.

In general, students' participation in class was brief, imprecise and mostly reactive. In other words most of the time classroom interaction was initiated by the teacher leaving students in a reactive position. In a few instances, however, some learners have occasionally initiated the conversation. During the recorded student initiated interactions, learners ask questions, correct their own mistakes, or correct their peers' errors. On several occasions students also have recourse to their first or second language to express themselves. Bilingual students use colloquial Arabic language with teachers whose first language is colloquial Arabic and Kabyle with teachers whose first language is Kabyle.

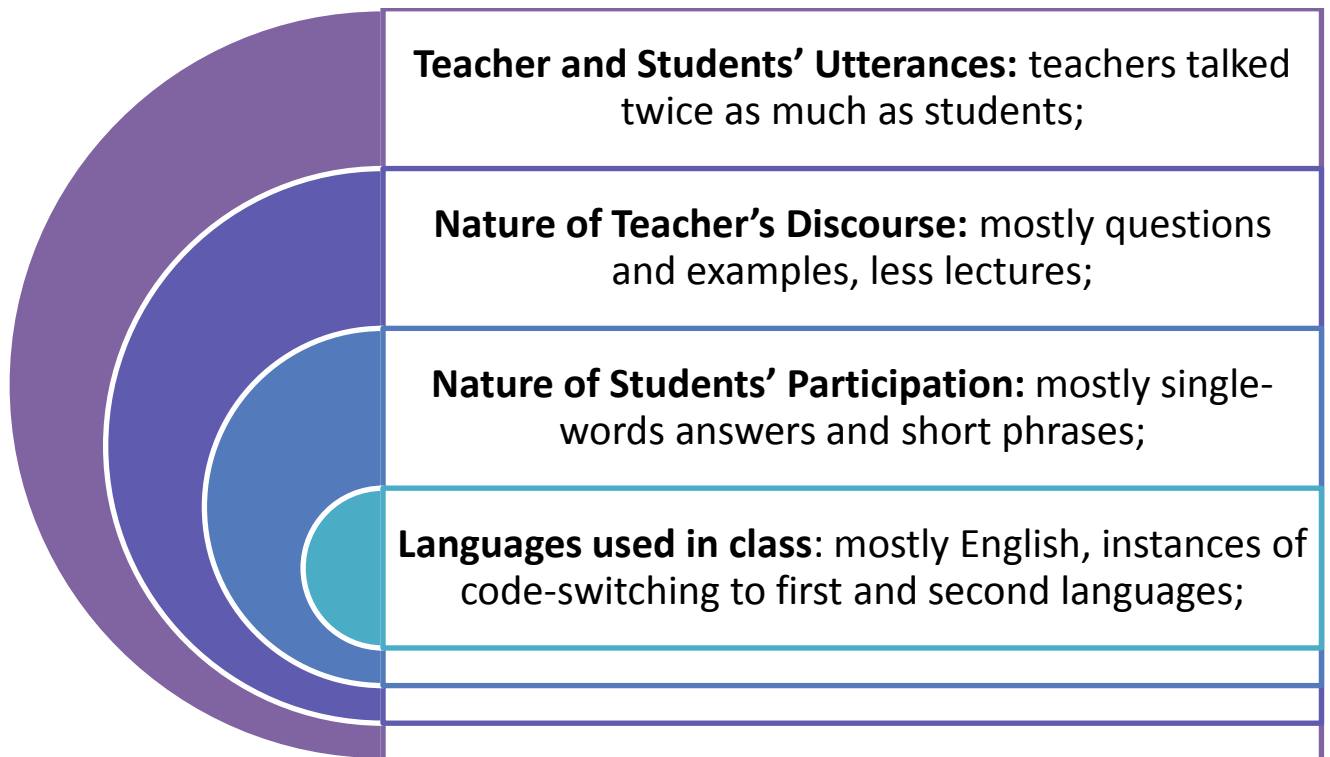


Figure 48 Summary of Quantitative Analysis Results

**Results Section Three**  
**Results of the Qualitative Analysis of**  
**Teachers' Unstructured Interviews**

## **1- Summary of Key Findings from Interviews Analysis**

Three categories of topics were discussed by teachers in the unstructured teachers' interview. Teachers provided evidence on the implementation of the Learner Centred Approach to language teaching. Other teachers' responses exposed some of the difficulties felt in class while implementing this approach. As they shared their concern about the EFL students' learning difficulties they encountered in class. The third part of participants' opinions was devoted to explaining some their most effective teaching strategies and tips they had used to help learners overcome their difficulties and achieve their learning goals.

Teachers' opinions about their experience in teaching EFL classes are classified into three main categories Inductive learning activities (ILA), Students' learning difficulties (SLD), Teachers' strategic solutions (TSS). The interviewees' responses about each of these categories of analysis are reported in the following tables.

### **1.1. Results of Teacher's Interviews Qualitative Analysis**

**Table 12 Interview Analysis Results 1 Inductive Learning Activities**

1	<b>Isolating a specific linguistic feature for study;</b>	<b>Lesson 04- Cause and Consequence Grammar-response 8</b>
		<b>Lesson 10- Question 22</b>
		<b>Lesson 10- Question 23</b>
2	<b>Providing enough data to illustrate the targeted feature;</b>	<b>Lesson 01 Question 1</b>
		<b>Lesson 08 The conditional present using student examples- Question 16</b>
		<b>Lesson 04- Cause and Consequence Grammar- Question 9</b>
		<b>Lesson 04- Cause and Consequence Grammar- Question 8</b>
		<b>Class 7 Question 13</b>

		<b>Question 3 Mrs M</b>
		<b>Class 10 Question 23</b>
		<b>Class 10 Question 22</b>
3	<b>Comprehensive intellectualization of the rule and structure use;</b>	<b>Lesson 02- Question 4</b>
		<b>Lesson 02- Question 4</b>
		<b>Lesson 05- intonation using the inductive method- Question 10</b>
		<b>Lesson 7 Teaching vocabulary through text- Question 14</b>
		<b>Lesson 10- Question 23</b>
		<b>Lesson 10- Question 20</b>
		<b>Lesson 06- Interview Response 12</b>
		<b>Lesson 05- Interview Response 11</b>
		<b>Lesson 05- Interview Response 10</b>
4	<b>Articulation the grammatical rule in learners' words;</b>	<b>Lesson 02- Question 5</b>
5	<b>Solving comprehension problems through further data analysis.</b>	<b>Lesson 05- Question11</b>
		<b>Lesson 05 Question10</b>
		<b>Lesson 10- Question 21</b>
6	<b>Attention to both grammatical forms and their meaning in context;</b>	<b>Lesson 01- Interview Response 1</b>
		<b>Lesson 8 Question 15</b>
		<b>Lesson 3 Question 7</b>
		<b>Lesson 3 Question 6</b>

See Appendix 1- Teachers' Unstructured Interviews.

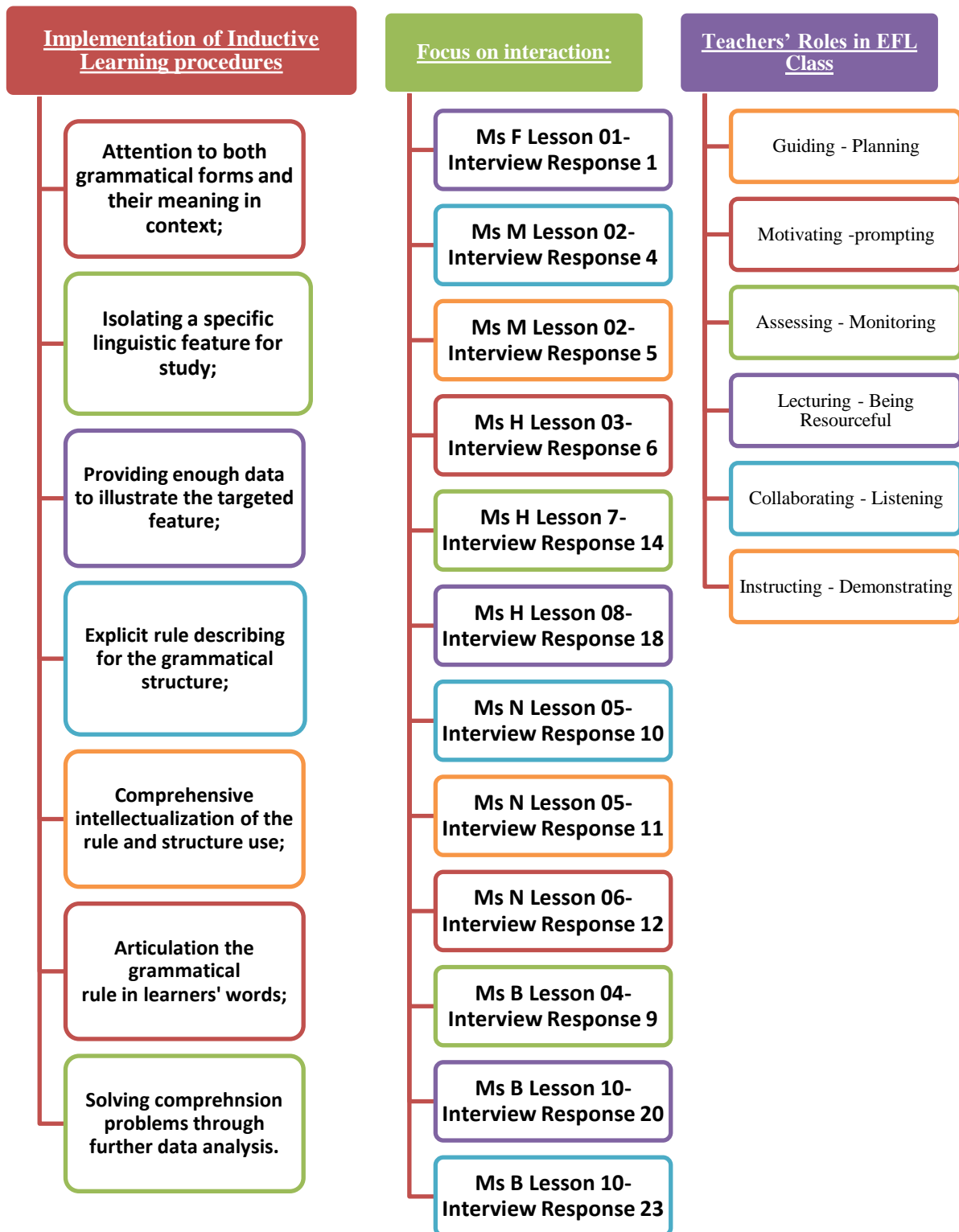


Figure 49 Indicators of the Learner-centred approach in the observed EFL classes

## 1.2. Interview Analysis Results Two- Learning Difficulties

**Table 13 Teachers' Responses about Students' Learning Difficulties**

Variables of analysis Students' Learning Difficulties	Questions and Classes
<b>Difficulty communicating in the target language</b>	<b>Question 18 to Lesson 08 teaching the conditional present using student examples.</b>
	<b>Question 20 Lesson 10</b>
<b>Difficulty with word meaning</b>	<b>Question 2 Lesson 01</b>
	<b>Question 2- Lesson 01</b>
	<b>Question 21 Lesson 10</b>
<b>Difficulty understanding the meaning of task instructions. And textbook language</b>	<b>Lesson 01- Question 2</b>
	<b>Question 19 Lesson 09 Teaching the passive through student language and minimal pair sentences</b>

Source Appendix 1, Transcripts of Teachers' Unstructured Interviews.

### 1.3. Teacher’s Interview Results Three Teachers’ Teaching Strategies

**Table 14 Adapting Syllabus and Learning Goals to Learning Needs**

Teaching autonomy	Lesson 7 Teaching vocabulary through text- Question 14
Adapting textbook activities to learners competency	Question 13
Discuss lesson topic and learning goals. To motivate learners’ interest in the learning.	Lesson 03 Question 6
Additional practice of a language point	- Question 15
Another way to conduct the lesson.	Lesson 04 Question 9
Realia in the immediate context of learning.	Lesson 02 Question 3
Extended Interaction with students in the task checking phase	Lesson 06- Question 12
Start with the familiar and previous knowledge	Lesson 06- Question 12

Source Appendix 1

**Table15 The Classroom Activities that Support Scientific Enquiry**

Use iconic signs ( pictures and diagrams to help with learning word meaning.)	Question 21
Learning from texts Inferring rules of writing a journal article from studying an authentic article Cyclic learning ( different productions from limited rules)	Question 22
Teacher role as a source and monitor. And use of pictures (icons) And familiar words.	Question 23
use of pictures and realia	Question 8
Inference Word meaning (key vocabulary at the beginning of tasks)	Question 6
Working from examples define the concept	Question 5

**Table 16 Teacher’s Emphasis on Teacher-Student Interaction**

Criteria	Teachers' Interview Response
Additional language use practice to overcome learning adversity of a language topic	Question 19
Leading- motivating students to interact. (roles motivator, and guide)	Question 20
Use of Anecdotes or jokes to illustrate a concept.	Question 17 Lesson 08 Question 16
Conveying meaning through humour	Question 16
Use students' examples to explain a concept.	Question 11
Trial and error	Question10
words meaning	Question 7 Lesson 03
Working from examples describe a process	Question 5 Lesson 02
Homework as self learning	Question 12

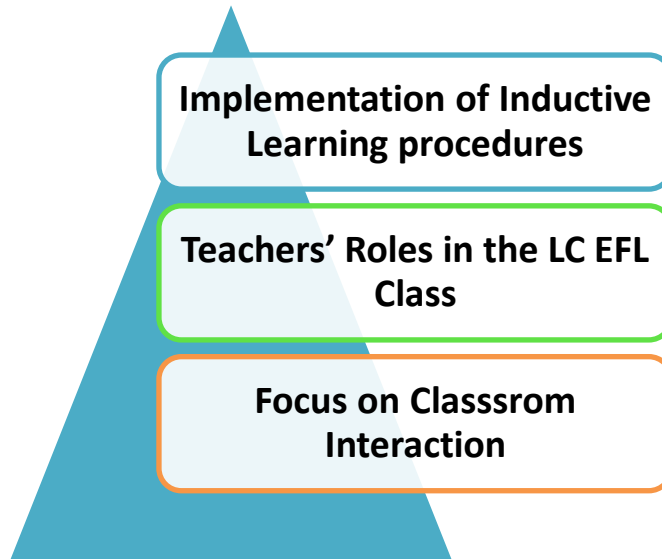
Source Appendix 1, Transcripts of Teachers' Unstructured Interviews,

## **2. Summarizing the Results of the Qualitative Analysis**

The qualitative analysis of the unstructured interview with the five EFL teachers revealed the teachers' attitudes toward the implementation of the learning-centred teaching principles and provided teachers' observations about the learning difficulties that their students face as well as the strategies employed by each teacher to remediate some of these difficulties. The results of the qualitative analysis were divided into three categories each category offered a number of points summarized as follows

**a. First Category Teachers' Attitudes to the Implementation of LCA in EFL Classes**

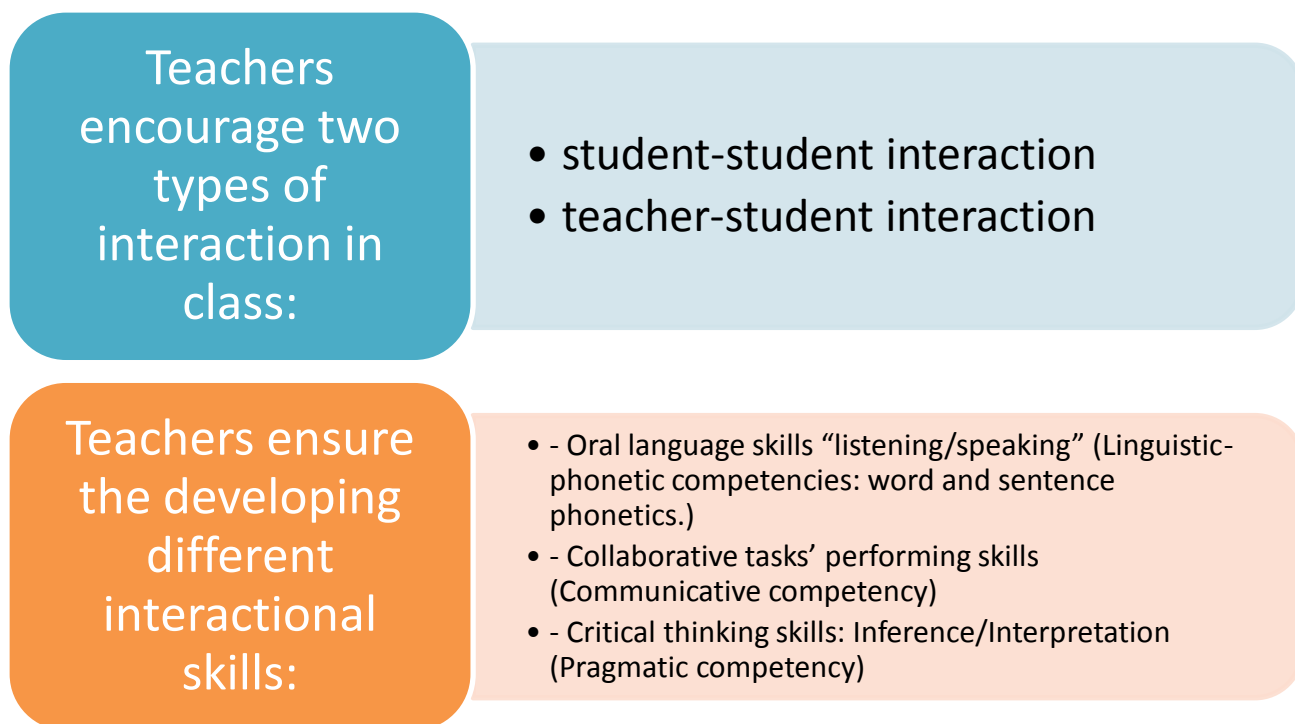
Teachers try to apply LCA by emphasizing three elements in their classes, these can be gathered into three sub-categories (i.e. Application of discovery learning, Focus on interaction and Teachers' supportive Roles in the EFL class.)



**Figure 50 Teachers' Attitudes about The Implementation of LCA Principles**

**The Three Indicators of the Learner-Centred Approach in the Observed EFL Classes**

- i. **Implementation of Inductive Learning Procedures** to engage learners' attention and critical thinking. Both aspect of learning increase learners' awareness and responsibility for their learning process and provide them with appropriate intellectual tools to engage in active learning.
- ii. **Teachers' Roles in the EFL Class** The Focus Is On The Teachers' Responses About The Actions That Clearly Indicate Their Roles In Class. Teachers' awareness of their different roles in class is revealed through a complex set of attitudes, objectives and behaviour, the combination of which has the double function of allowing teachers to apply an interactive approach to teaching, while helping them to plan and monitor learners' progress, thus keeping track of the entire educative process.
- iii. **Focus on Interaction** Teachers apply an interactive approach to learning while helping learners deal with their learning obstacles and prompt them to engage in meaningful interaction with the content their peers and the teacher. The focus is on teachers' responses that clearly indicate their inclination toward making learners interact and participate in class. The teachers provided two main frameworks for ensuring an evenly development of the interaction competence along side other language skills these two main concerns are presented in the following diagram.



**Figures 51 Interaction Skills in the EFL Class**

**b. Second Category EFL Students’ Learning Difficulties in Class**

The Indicators of students’ learning difficulties are summarised in three groups

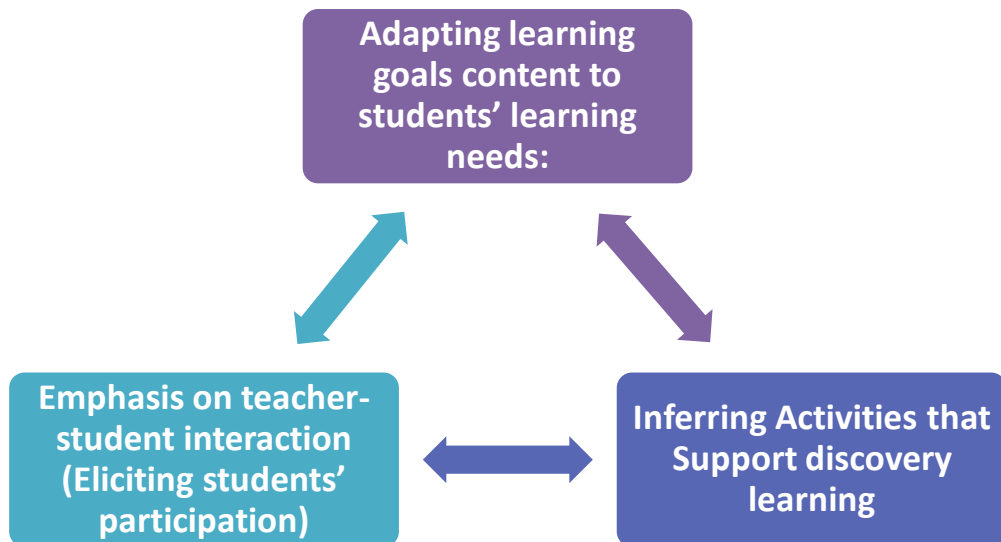
A- Sub- category 01 Inadequacy of textbook tasks for learners’ actual competencies

B- Sub-category 02 Students difficulties to express themselves in the target language

D- Sub-category 03 Students’ difficulties in comprehension tasks (meaning-making difficulties)

d- **Third Category Teachers’ Teaching Strategies**

Teachers’ strategic solutions for learning difficulties (TSS) (i.e. Use of inquiry and interaction strategies and pedagogical activities to improve learning.)



**Figure 52 Teachers' Solutions to Learners' Inferring Difficulties**

- 1- Adapting tasks and learning goals to the EFL class learning needs Teachers adapt textbook content and tasks to design lesson plans with learning goals in relation to learner needs of each class.
- 2- Adapting content to learners' acquired competences Use visual signs Providing learning tools Inferring meaning from Realia, gestures, pictures, cartoons and diagrams.metaphors, and storytelling.
- 3- Emphasis on teacher-student interaction different activities may help teachers facilitate classroom interaction for learners.
  - Checking instruction understanding,
  - Checking student homework,
  - Checking students' task performance,
  - Checking students' answers,
  - Varying inference questions,
  - Using humour,
  - Providing positive feedback and motivation ,
  - Using student generated language, using code switching to first and second language.

**Conclusion:**

The results displayed in the results chapter are the result of primary sources and quantitative intergrated to qualitative data analysis . these results are discussed in details in the discussion part of the research.

**Part III**  
**Discussion**

# **Discussion chapter 1**

## **Classroom Interaction for a Learner-Centred EFL Learning**

## **Introduction**

The first part of the discussion examines the type and role of classroom interactions prevalent in EFL classes and whether it indicates the nature of the teaching methods applied in lesson procedures. The initial hypothesis was that S-S interaction is probably more frequent as stipulated in the official EFL secondary education syllabus and that the principles of the learner-centered approach are implemented in most EFL classes. First, the chapter discusses the nature of classroom interaction that was most frequent in the data.

A mixed research is applied to identify the teaching paradigm followed in the observed EFL classes. It begins with a quantitative analysis of the ten lesson scripts to reveal the proportions of students' and teachers' classroom talk. The results were compared with the results of the qualitative analysis of the functions of classroom utterances.

In the second part of this section, we wanted to know whether the principles of the learner-centered approach are implemented in most EFL classes. In order to test the hypothesis, we undertook a qualitative analysis of the teachers' attitudes about the teaching methods they use in the secondary education EFL course and how they perceive their roles in the teaching/learning process. The results are triangulated with the results of the interview analysis of teachers' perceived roles in the EFL class. However, before we discuss the results of the analyses, we begin with a brief description of the different teaching approaches recommended by the secondary education EFL syllabus and their expected benefits on EFL learners' autonomy.

## **II. The Teaching Style Applied in the EFL Classes**

The official syllabus supports the implementation of CBLT whose objectives are in line with the Learner-centred approach to English learning as it promotes autonomous and responsible learning. According to the secondary education English syllabus, students are expected to communicate in the target language among themselves and with teachers and spend more time working individually or in groups on communicative tasks.

The difference between teacher-fronted classes and learner-centred classes is often reduced to the teacher's overall control of the learning progress, in favour of more flexible teaching procedures which allow for learners' agency in EFL learning. In other words, whether the teacher is overtaking classroom interaction and does not provide learners with enough learning space, which in most cases translates into the time allotted for peer interaction (S/S interactions), meaning that the amount of teacher talk in relation to the amount of student talk in a classroom might indicate the nature of the learning paradigm which is applied. Based on the principles of the learner-centred approach (LCA) it is believed that the rate of teacher talk vis-à-vis student talk plays a pivotal role in determining whether or not the teaching method is in line with the Learner-centred class.

Teacher-fronted classes differ from learner-centred classes, as Chaudron (1988) points out, in the degree to which students' contributions and participation were viewed as helpful or in contrast, detrimental to the lesson progression. In the traditional teacher-centred paradigm, students generally are not expected to speak unless they are spoken to, while in a student-centred class students are expected and even encouraged to contribute as much as possible and not shy out of any questions and ask for help when needed. (Chaudron, 1988) In this sense, the fewer teacher talks, implies more opportunity for students to speak in the L2 classroom insofar as the more learners talk, the more they are in control of learning. The overall goal of the communicative approach is to make learners interact in the target language as much as possible. Thus, supports the idea that most classroom talk should be done by students, in student-student interactions and occasionally addressing the teacher for help (Larsen-Freeman, 1986)

## Chapter 1 of the Discussion Classroom Interaction for a Learner-Centred EFL Class

However, this assumption has been challenged in later literature (Nunan, 1991). Deciding on the ideal amount of time teachers should spend talking to their students is a complex question. "whether or not it is considered a good thing for teachers to spend 70 or 80 per cent of class time talking will depend on the objectives of a lesson and where it fits into the overall scheme of the course or programme" (Nunan, 1991, p. 190). Thus, what determines the ideal amount of teacher talk in LCA-based class is related to the context of instruction, and the difference in students' levels of proficiency and acquired competencies in particular.

The collected corpus for this study consisted of randomly selected EFL classes where mainly CLT and CBLT approaches were applied. However, as past studies revealed less classroom proficiency from EFL students, a number of negative assumptions about students' autonomy and proficiency levels in English were expected from the participants' part. Thus, the analysis expectations, roughly pointed out a primarily teacher-fronted characterised classroom in contrast to a learner-centred one, due to learners' and teachers' difficulties to adapt to the educational reforms. Unexpectedly, though, the results of the quantitative analysis showed disparate and somewhat contradictory pieces of evidence. The results of the quantitative analysis of teachers' and students' classroom talk revealed interesting evidence in favour of the application of the learner-centred approach, while, features of the teacher-fronted approach were also observed.

According to the principles of the communicative language teaching approach, more peer interaction and group work should have been observed in EFL classes. Instead, the teachers' talk has been registered as slightly higher than the students' classroom talk.

Indeed, while communicative tasks were performed in class following textbook indications, communicative competence was at the centre of the student's textbooks both in framework and materials; Encouraging teachers to speak less than students in learner-centred classes, as to let learners express themselves and solve communication problems on their own before, checking in their answers, while teachers evaluate their progress without much interference. The results however reveal much more involvement from the teachers in students' performance than expected. Students' contributions to pair-work and group work seemed negligible in comparison to the teachers' contributions in the form of explanations, modelling and task organising, the fact seemed to indicate that the teachers may have adopted the teacher-fronted model.

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The turn towards Competency-Based Language Teaching (CBLT) is an attempt to improve the quality of teaching and learning because of its focus on learning outcomes. Richards and Schmidt (2002) define the Competency-Based Approach (CBA) as, “An approach to teaching that focuses on teaching the skills and behaviours needed to perform competencies. Competences refer to the student’s ability to apply different kinds of basic skills in situations that are commonly encountered in everyday life. But in the context of Teaching English as a Foreign Language (EFL) in Algerian Secondary Schools, aims and outcomes of instruction are derived from learners learning needs through the analysis of tasks that learners perform in the context of learning situations. According to Auerbach (1986), language instruction under Competency Based Language Teaching (CBLT) is

1- Autonomy oriented instruction; the focus on developing communication skills to enable students to become autonomous individuals capable of coping with learning situations in any context.

2- Performance oriented instruction; Task-based approach emphasises what students can do as a result of instruction in other words, observable performance in tasks and activities is valued more than the abstract notion of knowledge or the ability to talk about language.

3- Context based instruction; language functions which are needed in communication are taught in concrete tasks rather than teaching language in isolation. Students learning needs analysis determines the language forms and skills required by the situations in which they will function.

4- Goal oriented instruction; complex language instruction aims are broken down into meaningful goals for each lesson. Those Objectives are narrowly focused on basic skills, whose accumulation over time gives both students and teachers a clear sense of progress. Outcomes are made explicit right at the onset of a lesson so that students know what behaviours are expected from them.

5- Formative assessment-based instruction Students are tested before during and after instruction to monitor their acquisition of skills so as to make the assessment continuous and ongoing.

These features reflect the focus on the learners’ progression toward the acquisition of linguistic, semantic and pragmatic competencies. This interest in learner-centeredness is what

makes CBLT a learner-centred approach. Official recommendations of applying CBLT exclusively in EFL classes are clear evidence of the shift of the Algerian educational system toward LCA. Despite the generalisation of the reforms in the country, practical observations reveal mitigated opinions and different levels of implementation. Research suggests that a teacher-centred approach to EFL teaching is still prevalent in most Algerian secondary schools (Baghoussi, 2021). The rest of this chapter will be consecrated to discussing whether and to what degree LCA principles are implemented in the observed classes.

### 1- Teachers and Students' Classroom Language Patterns

Teacher and student talk patterns indicate the nature of the learning paradigm applied in class. By comparing the amount of teacher talk with the amount of student talk in all ten scripts, it is possible to value the contributions of each to classroom discourse. For instance, when the number of teachers' utterances and those of students are compared, the patterns of performed roles in class are revealed and indicated prioritized objectives. As shown in the graph below

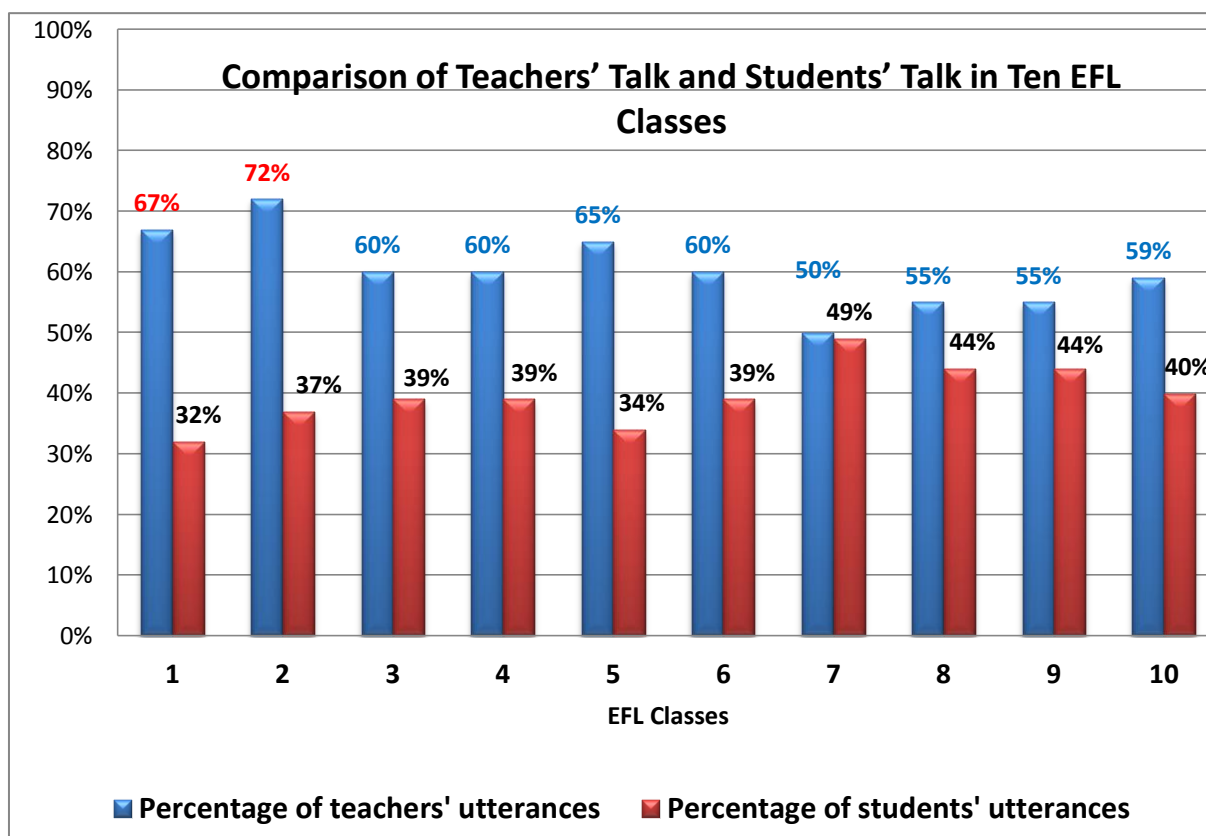


Figure 53 Comparison of Teachers' Talk and Students' Talk in Ten Classes

To the exception of lesson 07, in all other classes, teachers produced more utterances than students. These values contradicted expectations. While, learner-centred teaching paradigms advocate for more practicing of the target language by students, thus expecting learners' classroom talk to increase significantly more than teacher talk. But results show a higher rate of teacher talk. This suggests a difference in the roles of teachers and students.

**Table 17 Examples of Teachers' Utterances**

Type of utterance	Example	Lesson-Line	Function
<b>Interrogative sentences</b>	T "Okay. What happened to the Exxon Valdez do you remember?"	<b>L 01-[01]</b>	<b>Question</b>
	T "Do you know what does that mean?"	<b>L 01-[02]</b>	
	T "If I want to describe the quantities of ink in my red pen and my black pen, what should I say?"	<b>L 02-[02]</b>	
	T "Anything to correct yes or no?"	<b>L 03-[02]</b>	
<b>Imperative sentences</b>	T "Good morning! Hurry up!"	<b>L 03-[01]</b>	<b>Classroom management</b>

These results suggest Teachers' classroom talk is focused on helping learners explore their potential inquirers by activating the teachers' roles of guides and resources. It is hypothesized that teachers may have applied a modified version of learner-centred approach which includes more involvement from part of the teacher in the students' performance of tasks. The nature of teacher's utterances may be informative of the role played by teacher talk in the observed teaching model.

## 2- Teachers' Inference Questions in all Ten Classes

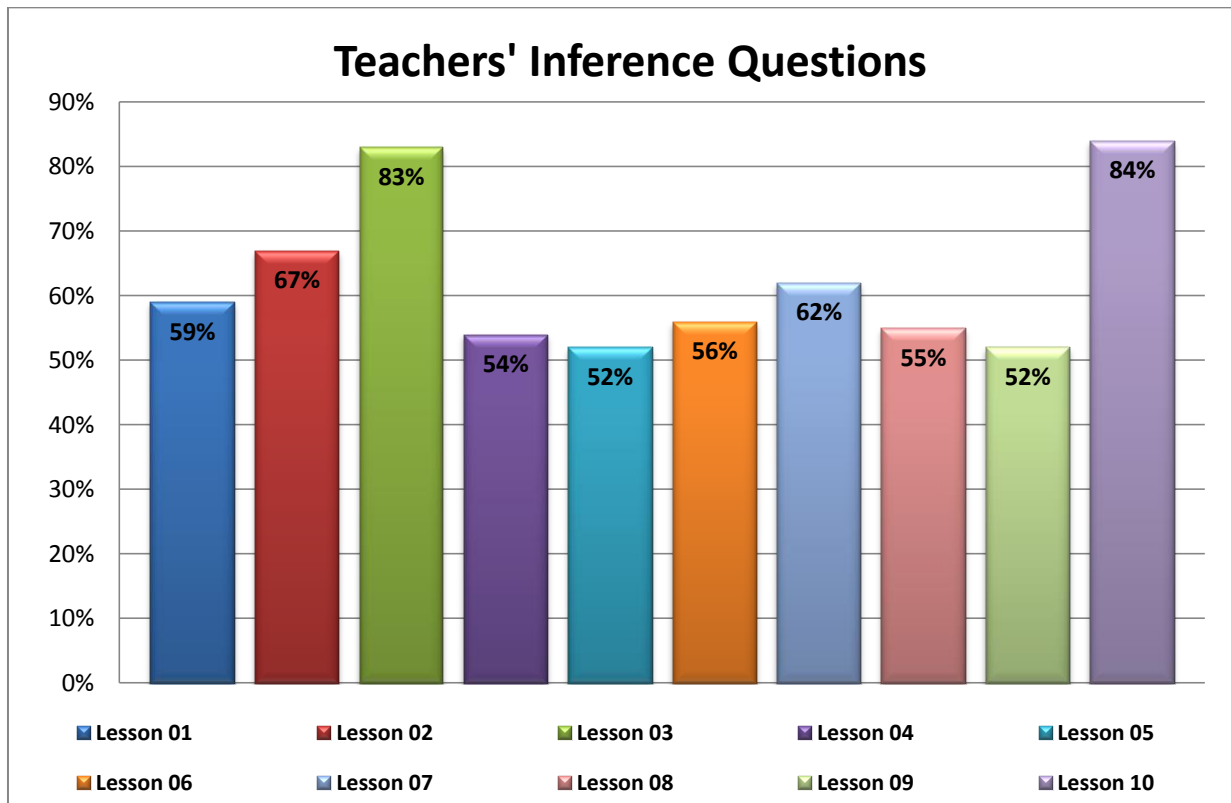


Figure 54 Teachers' Inference Questions in all Ten Classes

Questions took more than half of the teachers' utterances in all ten classes. This is an important percentage, implying that teachers' focus was on eliciting participation from students for large portion of the class time. While it was expected to record more lectures and explanation, the number of declarative utterances appeared to be much less than expected.

3- Number of Teachers' Discourse use for Lecturing

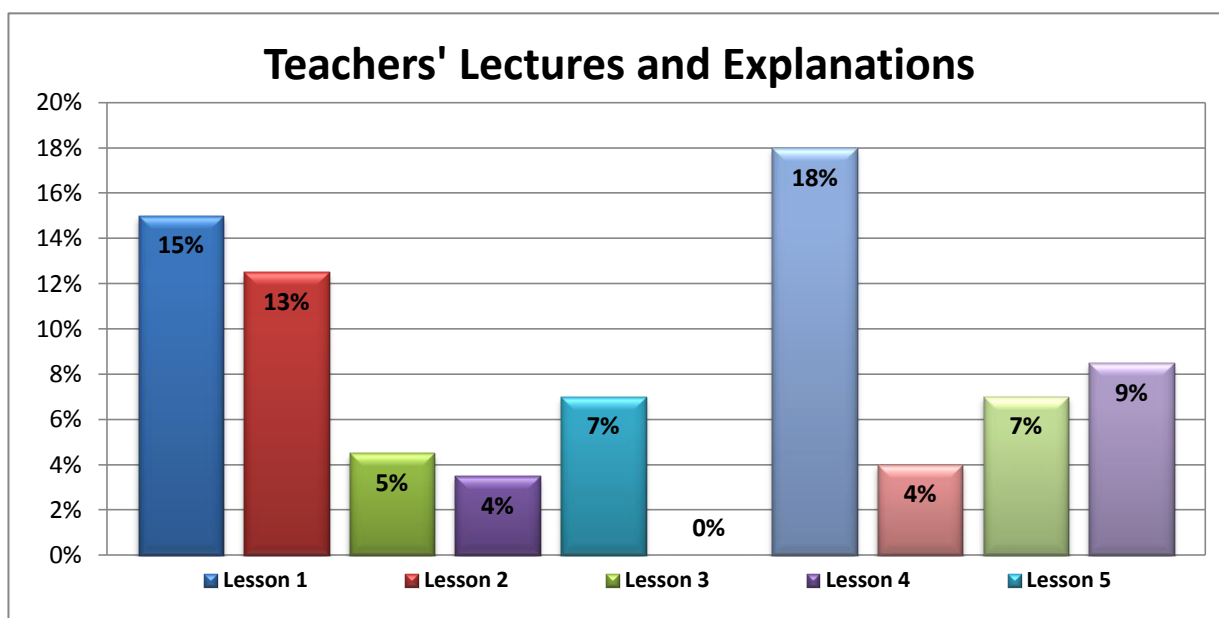


Figure 55 Teachers' Mini-Lectures

The next graph shows an interesting contrast between the percentages of lecturing and examples which doesn't exceed two percent of teacher's talk against six percent of providing examples.

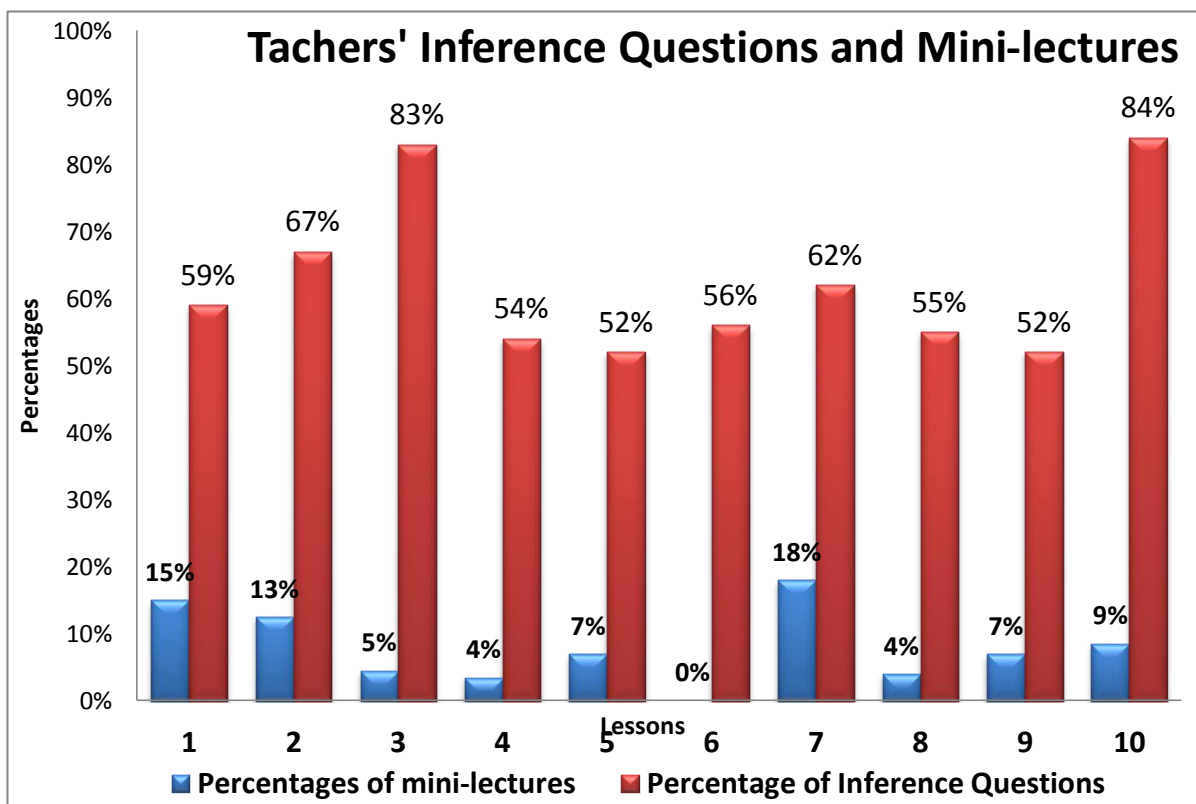


Figure 56 Comparison of Teachers' Inference Questions and Mini-lectures

The last graph demonstrates the variety of students' responses in class. When asked questions, learners answer mostly in fragments of sentences thirty-eight percent of which were one-word answers and seven percent of subordinate clauses. However, they managed twelve percent of full correct sentences. But when learners couldn't answer they resorted to silence in seven percent of the time.

In general, students' participation in class was brief, imprecise and mostly reactive. In other words most of the time classroom interaction was initiated by the teacher leaving students in a reactive position. In a few instances, however, some learners have occasionally initiated the conversation. During the recorded student intuited interactions, learners ask questions, correct their own mistakes, or correct their peers' errors. On several occasions students also have recourse to their first or second language to express themselves. Bilingual students use colloquial Arabic language with teachers whose first language is colloquial Arabic and Kabyle with teachers whose first language is Kabyle.

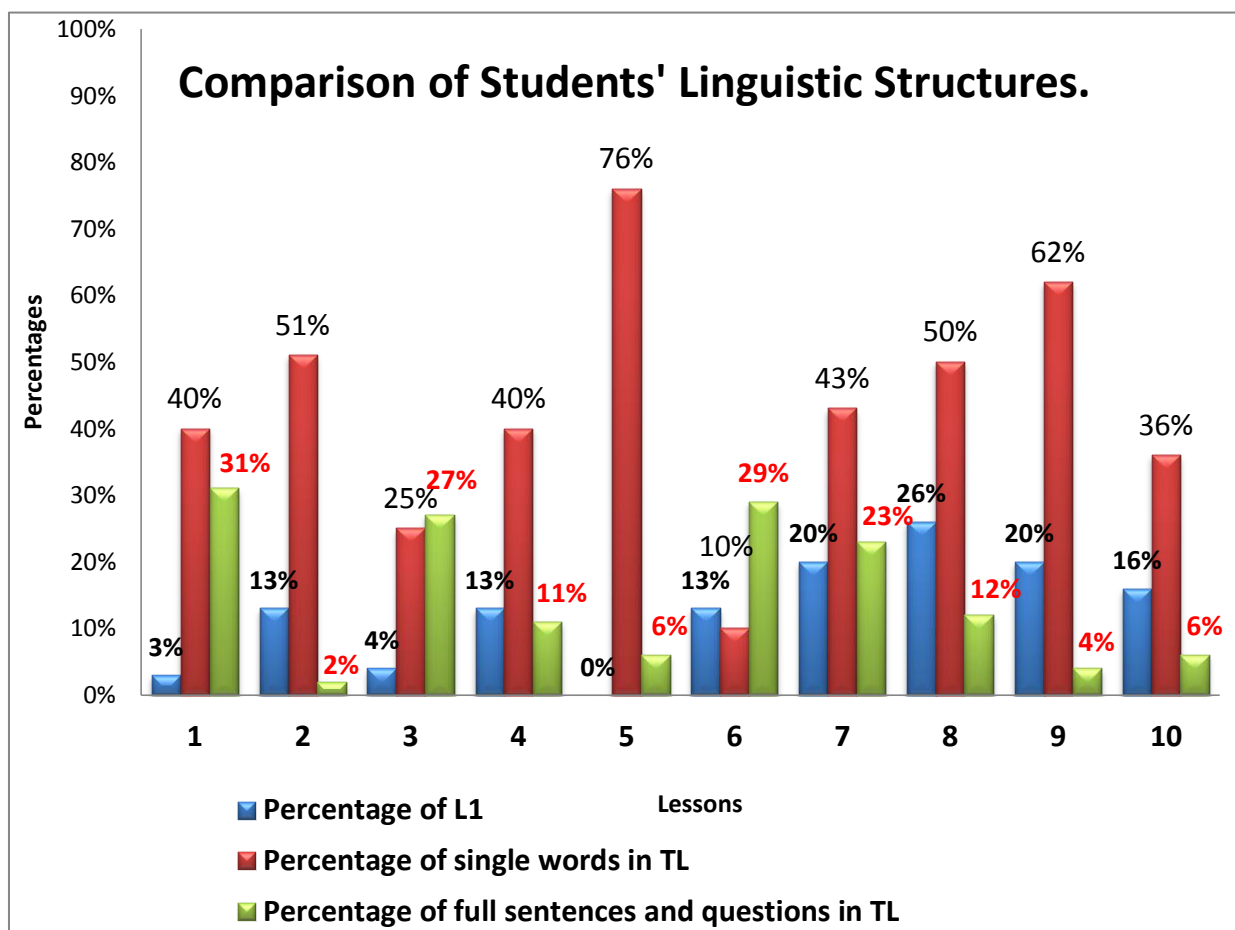


Figure 57 Comparison of Students' Linguistic Structures.

## Chapter 1 of the Discussion Classroom Interaction for a Learner-Centred EFL Class

Students produced very few complete sentences in the TL target language, including questions. In contrast, they used their native languages (Kabyle and/or Arabic) nearly in an equal amount as TL. However, the rate of one-word answers and noun-phrases are higher than the other structures. This shows the willingness and effort of students to communicate and be effective agents of their learning despite their difficulties in forming complete sentences in the target language.

In general, students' participation in class was brief, and mostly in reaction to teachers' questions and prompting. In other words, most of the time interaction was initiated by the teacher and one or more students tried to provide a correct answer. In a few instances, however, some learners have occasionally initiated the conversation to ask questions, correct their own mistakes, or correct their peers' errors. On several occasions, students also have recourse to their first or second language to express themselves.

Although LCA to teaching was expected to be implemented in the studied EFL classes as stated in the EFL program, the observation of both teachers' classroom utterances analysis and interviews reveal teacher preferences in teaching strategies and procedures. As a matter of fact, the teachers' responsibility in guiding learners' efforts is increasingly called for to encourage and make students comfortable and help them express their ideas. As a consequence, the teachers' classroom talk increases.

1. Results reveal that teachers and students use nearly the same amount of utterances during class time.
2. The elevated rate of questions and feedback asked by teachers indicate the communication intent of teachers and indicate an elevated rate of T/S interactions in all ten classroom recordings.
3. The number of students' utterances indicate students' active role in class, especially in response to teachers' efforts to communicate.

Overall, the quantitative analysis of classroom observations confirm abundant use of T/S interaction in the corpus, but does not say how it is structured, when it occurs (during the lesson) or what are its functions. A closer look at the nature of language used during T/S interaction shows a number of recurrent expressions used by teachers and many language structures that students frequently use.

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The quantitative analysis of the data demonstrates that teachers value interaction with students. They spend most of their talk time asking questions for the whole class or for individual students. This shows their willingness to offer learners time to speak in class and ensuring that learners have sufficient time practicing the English language. A closer look at teachers' attitudes and opinions about applying inductive learning styles in a learner-centred environment will show how they view their role in the EFL class and the strategies they believe reflect more their teaching style objectives.

It can be deduced from the above that teachers do not rely on a teacher-centred method of teaching, as their classroom discourse includes more questioning, explaining task instructions and generally prompting learners' participation in class. However, it is of value to learn about their objectives in doing so from them. This is why a qualitative analysis was conducted using an unstructured interview to examine teachers' attitudes toward classroom interaction, and the method of teaching they employ. The results (see result chapter, section of interviews content analysis.) provided three distinct categories of teachers' attitudes. First, teachers rely on a competence-based approach to teaching. Lesson goals and secondary objectives determine the topic, content and structure of the lesson procedures and dictate the tasks and activities used in class. Second, teachers often rely on dialogic practices like questioning and prompting interactions, and third, teachers' roles which are in line with the learner-centred approach to EFL teaching. Some of the questions that were asked were enquiring about clarifications about tasks or explanation or specific behaviour in class. For instance, to know what type of teaching method was implemented in class, we asked teachers to explain their goals and lesson procedures. Other questions focused on the teachers' roles and the roles of interaction in class, whether it is planned and how it is implemented in class. The following results were discussed. First, it appears that teachers believe in the efficacy of the EFL secondary education syllabus and try their best to implement an inductive teaching method while striving for helping learners master induction, initiate interaction with their peers and infer meaning on their own. The other indicator that teachers adhere to the principles of a learner-centred approach is in the way they envision their roles in class. Teachers believe that they have to manage different roles in different lesson stages. A set of three categories of perceived teacher roles were deduced from the interviews.

### **III- Teachers' Attitudes on the Implementation of LCA**

As the learner-centred approach supports learners' gradual progress toward autonomy by allowing the adaptation of different methods and strategies, it is of interest to understand how teachers facilitate students learning in an LCA environment. A mixed data analysis is applied to integrate the nature of teachers' utterances and their functions. Teachers' interviews provide a deeper view on the motives of teachers for using LCA.

#### **1- Results of Unstructured Interviews Analysis**

Teachers' opinions about their experience in teaching EFL classes are classified into three main categories Inductive learning activities (ILA) Key Findings from Interviews Analysis teachers' opinions Implementation of Application of competency based learning in LCA class

#### **2.1. Indicators of the Learner-Centred Approach in the Observed EFL Classes**

In this section, the results of the unstructured interviews are discussed in relation to the context of the study. First, we provide a quick reminder of the nature of the question and the reason for asking it. Second we provide examples from the interviews as excerpts from the interviewees' responses are provided and explained. Occasionally the answers are contrasted with an example from the lessons' transcripts to illustrate the their point.

The first part will start by the first category of results

First by explaining why EFL teachers choose to apply CBLT a little lit review, then we discuss teachers' attitudes.

Second, we define interaction in the context of the learner's centred approach which had been emphasised in the syllabus, and then we explain the teachers' attitudes toward interaction as a goal and tool of learning.

Thirdly, we discuss teachers' attitudes about their own roles in EFL education and how they perceive their effect on the learning process.

### **A- Teaching with the Objective in Mind**

The goal of a competency-based instruction is the development of learners' competencies and language skills through the formulation and achieving of precise learning objectives.

Another central concern of teachers seems to be related to explaining the purpose of chosen lessons and tasks, for learners. Instead of just lead learners to learn the “what?” (Knowledge) and the “how to?” or the know-how, the rules and procedures related language use. Teachers seem to emphasize more and more on the question “why?” as they consider the importance of the holistic meaning dimension of teaching.

Students come to class with their past experiences and previous knowledge as English learners which often transpire through their behaviour in class. In this regard, when teachers elicit answers from learners about any particular subject they make appeal to this kind of knowledge, knowing well, that a number of their students' assumptions about the English language may be incorrect or incomplete. One common belief that is spread among the participant students in this study had been pointed out by Mrs H. She had noticed that most students in secondary education avoid the use of the passive voice in their writing assignments because they believe it is the most difficult topic in English grammar. Students dreaded lessons on the passive voice and find it difficult to understand, memorise and use verb tenses in the passive form. When she was asked why she talked about this issue, Mrs H said that she strived to change that conviction and to make learning the passive tenses easier using simplified strategies to make the learning process “as fun as a game.”

#### **Table 18 Interview with Mrs H, Response 19**

Ms H opened the lesson, by expressing to students what she observed as a teacher for several years i.e. the fact most learners do not use their acquired grammatical competence in their writing habits. By doing so, she sets a realistic goal for the lesson. In this case, the teacher called for students' awareness of their own learning difficulties to use the passive voice in their writings to keep them interested and responsible for learning differently. The teacher invited the students to think about “why, they learn the passive voice each year in high school?” and “why they may have failed to acquire it as a writing skill?” before considering the “what the grammatical/linguistic knowledge” and “the how the inductive grammar method” of learning.

<b>Class9</b>	Response 19
<b>Interviewer</b>	“Why did you talk about the students' difficulty to remember and use the passive voice?”

<b>Ms H</b>	“I wanted to explain the importance of practice in learning the passive voice. Often, learners dread this specific topic and perform poorly in exams, mostly because of the idea that the passive voice is too complicated and too difficult to learn. My goal was to break this conviction and replace it with simple steps to render the most complex process easy as game.”
-------------	--

By considering the goal of their learning, and the possible reasons for their learning difficulties, learners would look at the problem from a pragmatic perspective and try to achieve acquisition of a pragmatic competence using different strategies instead of learning “what and how”, and struggle to memorise grammar rules mechanically without an effect on their writing skills.

**Table 19 Excerpt from Lesson 9 Transcript**

T	You follow! So, for today, we are going to talk about something you see again and again and again every year! Every year we’re asking you to turn sentences from the active form to the passive form. On vous a embêté avec la voie passive je sais! Mais est-ce que vous avez mémorisé? [L2]
T	What is the difference between active and passive? En français, quelle est la différence entre une phrase active et une phrase passive? [L2]
Ss	[SA]

Source Appendix 02- Recorded lesson Transcripts

### **B- Focus on interaction**

Interaction is the most prominent criteria for a learner-centred approach. Although, CBLT and communicative methods stress the importance of peer-interactions and rely on students’ communicative competence and their ability to interact in the target language effectively enough to initiate conversations about lesson topics, all types of interaction are considered positive in the LC class, as the final goal is to develop the interactional competence of learners in different situations. All five teachers’ expressed their conviction about the essential role of interaction in EFL classes.

Studies show that negotiating meaning during classroom interaction facilitate comprehension and learners who actively participated in meaning negotiation show better ability to understand instructions and retain more vocabulary than those who do not. Ellis et al (1994). The teachers’ interviews show that teachers give importance of students’ interaction in class and try to motivate them interact in English as much as possible. Teachers’ identified four main reasons for integrating and focusing on learners’ participation in classroom interaction

- 1- Raising learners’ curiosity toward a subject to lead them to participate (The motivation principle in LCA)

- 2- Practice previous knowledge and reinforcement of speaking language skills (The practice and development principle in LCA)
- 3- Interaction as a learning progress assessment / observation tool (The monitoring principle in LCA i.e. expressing what they know and showing what they do not know)
- 4- Provide all learners with equal time and opportunity for self-correction and problem-solving. (The discovery and solution design principle in LCA)

As a way of illustration, analysis of excerpts from the first lesson transcript (Transcript 01 Oil Shipping wreckage) shows that as Mrs F conducted the Grammar / Pre-Writing Lesson with second year students, the main goal was the Discovery of Language items and grammatical structures to write a press release. Comprehension of the learning situation and the instruction was necessary for the next step (writing). The first task asked required learners' description of the photograph on the textbook page. Only few students tried answering the question as they found difficulty understanding what was expected from them. Moreover, they couldn't express their confusion properly, until the teacher prompted and guided the conversation.

**Table 20 Excerpt from Lesson Transcript 01 Oil Spill Catastrophe**

- |     |  |
|-----|--|
| 5.  | T Do you know what does that mean?   |
| 6.  | Ss [SA]  |
| 7.  | T Look at the picture! Look at the image and tell me what happened and what is it caused by?                             |
| 8.  | Ss S 2 ----- oil spil-l-ed up. [OWA]   |
| 9.  | T Indeed, The ship was carrying oil pointing at the black matte displayed in the photo. look What happened to the beach? |
| 10. | Ss S2 Polluted [OWA]   |
| 11. | T It was polluted. Just polluted? by what?   |
| 12. | S2 Oil. [OWA]  |
| 13. | T What happened to the Exxon Valdeaz first?  |
| 14. | Ss Students reading from the book "It wrecked in the sea". [FSA]   |
| 15. | T Yes, the ship was destroyed and the oil got out and spilled on the water.  |
| 16. | T Look at the damages of oil spill, What happened to the hotels and restaurants?   |
| 17. | Ss They were ... [Incomplete sentence] [IncS]  |
| 18. | T they were what?  |
| 19. | Ss S3 Closed [OWA]   |
| 20. | T Now look again to the picture and tell me what you think happened to the fish?   |
| 21. | Ss S1 Suffocated. [OWA]  |
| 22. | Ss S2 Asphyxiated. [OWA]   |
| 23. | T So then we can say that fish died, because they suffocated because of lack of oxygen.                                  |

24. T Okay let's recapitulate. After the Exxon Valdez catastrophe there was some damages.  
 25. T So what happened?  
 26. Ss The water is polluted. [FSA]

Source Appendix 02- Recorded lesson scripts- Lesson Transcript 01

The researcher asked the teacher enquired about the reasons of the extended conversation about the picture at the beginning of the lesson to know whether the discussion about the picture helped learners understand the topic of the lesson. Mrs F responded to the first question of the researcher by emphasizing the role of the intriguing photograph in calling for their curiosity. In her opinion their desire to know what it was about helped learners to overcome their shyness and try answering questions about it. The following table summarizes teachers' opinions and attitudes about the role classroom interaction in their teaching experience as teaching strategy.

**Table 21 Teachers' Open-Question Responses on Interaction**

Interviewee	Interviewee's Response
<b>Mrs F Lesson 01- Interview Response 1</b>	<b>Mrs F</b> "Indeed, at least students were intrigued by the photo. It played a role in raising their curiosity, I think. The fact that made them willing to try answering questions about it."
<b>Lesson 02- Interview Response 4</b>	<b>Mrs I</b> "[...] I invite learners to use their own words to describe what they see so that I can determine what they know and what they do not. After I attract their attention and hear their trials, I provide the correct words in English. Learners remember better when they try for themselves."
<b>Mrs I- Lesson 02- Interview Response 5</b>	<b>Mrs I</b> "Well it is always better to let learners talk about what they learned[...]I prefer ask them to define the concept we just studied to know if they were listening and be sure of what they understood."
<b>Mrs H Lesson 03- Interview Response 6</b>	<b>Mrs H</b> "Yes, I wanted to be sure that students know exactly what we are to talking about before we start the lesson[...] This compels them to pay attention to what comes next."
<b>Mrs H Lesson 7- Interview Response 14</b>	<b>Mrs H</b> "[...]all I did was giving them the opportunity to work on the text at their own pace before we collectively discuss it in the

	much restricted class time.”
<b>Mrs H Lesson 08- Interview Response 18</b>	<b>Mrs H</b> “Yes! I was agreeably surprised to hear him produce a correct sentence related to the topic. His intervention indicated that he understood why and how to express wishing [...]”
<b>Mrs N- Lesson 05- Interview Response 10</b>	<b>Mrs N</b> “... even if they give a wrong answer it is preferable to let them try before providing them with the exact rule.”
<b>Mrs N- Lesson 05- Interview Response 11</b>	<b>Mrs N</b> “Even if student’s questions are seemingly out of topic, sometimes they turn out to be quite useful [...] And second I turn students’ attention back to the lesson topic, thus preventing too much waste of time.”
<b>Mrs N-Lesson 06- Interview Response 12</b>	<b>Mrs N</b> “[...] I thought it best to allot more time to discussing student’s answers. This way we gain valuable time to check learners’ difficulties and provide support only where it is needed [...]”
<b>Mrs B-Lesson 04- Interview Response 9</b>	<b>Mrs B</b> “[...] Asking them to describe the eating habits of their ancestors is a way to make them practice their previous knowledge. Moreover, when we start by what learners know it is easier to get them to talk.”
<b>Mrs B- Lesson 10- Interview Response 20</b>	<b>Mrs B</b> “[...] Sometimes it is difficult to lead reluctant students to talk but with perseverance I often get positive results.”
<b>Mrs B- Lesson 10- Interview Response 23</b>	<b>Mrs B</b> “First of all I encourage them to express themselves in English as often as possible. Also, I hope to engage their memory to find the English word for each element in the picture [...] part of my job is to provide them with extensive vocabulary which is necessary to develop their ability to describe.”

Each teacher pointed a different benefit for encouraging learners’ classroom interactions and the necessity to install an interaction supportive environment. A few key points were discussed in the teachers’ interviews which showed their interest and focus on interaction in their classes

### **C- Teachers’ Perceived Roles in EFL Class**

Teachers’ concern about the implementation of inductive learning as means to improve learners’ autonomy is justified by the number of difficulties that some students face

when performing inductive activities. Teachers' representations of learners' learning styles and shortcomings, often determine their attitudes toward their roles in class. Experienced teachers are able to make assumptions about students' learning obstacles in class.

According to their collateral experience, some teachers are even able to predict students' learning difficulties such as their recurrent grammatical mistakes, or, what they consider complicated vocabulary items, with enough accuracy to plan additional exercises and explanations in advance. They seem to know what students are not able to understand without help and what tasks are easier for them to perform. To improve their student's learning experience, teachers tried adapting some activities to fit learners' level of competence.

We wanted to know why teachers choose to focus on initiating classroom interaction and helping learners participate in every conversation. So we analysed teachers' interviews about their perceived roles as EFL teachers. Most teachers agree about a set of six types of roles and duties that they believe, define their profession. As we sifted through the teacher's explanations about their roles, we organised their roles in a set of three trichotomies according to three categories which match Peirce's three philosophical categories 1- the aptitudes and dispositions teachers need to possess to perform their teaching role, which correspond to Firstness. The reason is that most of these teachers' dispositions are abstract cognitive constructs in the mind that cannot be palpable before their application in action. As Pikkarainen, (2014) explains that competence and disposition are things which stay invisible or virtual until they are manifested (performed) in action. 2- Teachers' actual actions in class These are the actual everyday implications of the first category. They are behaviours that can be observed and quantified. But, their implications may not be grasped without a thorough analysis of why they are implemented. They constitute the category of actual events secondness. And, 3- the desired effect on students These correspond to the intention behind said behaviours and actions in class. They correspond to the category of thirdness because they refer to general concepts of what should happen. Teachers' expectations and intentions are inspired by a larger body of educational theories. They are what relate teachers' activities to their competencies and to the goals of teaching which is to have positive effects on learners and eventually affect learners' competence as well. Ultimately this is what education is about, as explained in Pikkarainen's words "Educational action can be reasonably understood as an insecure and complicatedly mediated trial to affect another person's competence." (p.1) the teachers' interview responses that reveal the aforementioned teachers' roles in the EFL class are displayed in the next table.

**Table 21 Teacher’s Opinions about their Roles of in the EFL Class**

The teachers’ interview responses to open ended questions and the focus of their answers suggest their focus on specific aspects of their perceived roles in class. These offer an over view of what actions they believe are more effective in remediating to learners’ learning probelems in class. In the table bellow teacher’s quotations are analysed according to the most important roles of the EFL teacher in the Inductive EFL class.

<b>Teacher’s Role in the EFL Class</b>	<b>Interviewees’ Response</b>
<b>Guiding- Lesson Planning</b>	<p><b>Mrs F</b> “Next time we will discuss the ideas and structure of the textbook article using their understanding of today’s concepts and ideas.”</p> <p><b>Mrs H</b> “{additional session}...The other reason is that there were a great number of absentees last time because of the snow, so it was beneficial for all the class.”</p>
<b>Motivating -Prompting (Empowering)</b>	<p><b>Mrs B</b> “Sometimes it is difficult to lead reluctant students to talk, but with perseverance I often get positive results.”</p> <p><b>Mrs F</b> “I had to make sure learners understand the context of the activity first.”</p> <p>“ <b>Mrs H</b> “My goal was to break this conviction [<i>... that the passive voice is difficult to learn. ...</i>] and replace it with simple steps to render the most complex process as easy as a game.”</p>
<b>Instruct - Demonstrate</b>	<p><b>Mrs H</b> “I asked learners to read the text at home to get familiar with its ideas...”</p> <p><b>Mrs I</b> “[... ]Even if they give a wrong answer it is preferable to let them try before providing them with the exact rule.”</p>
<b>Lecturer- Resource</b>	<p><b>Mrs H</b> “Yes, I briefly introduced the functions of “wishing” and “regretting yesterday. But that wasn’t sufficient...”</p> <p><b>Mrs B</b> “... part of my job is to provide them with extensive vocabulary which is necessary to develop their ability to describe.”</p>

<b>Assessing - Monitoring</b>	<p><b>Mrs I</b> “I prefer to ask them to define the concept we just studied to know if they were listening and be sure of what they understand.”</p> <p><b>Mrs N</b> “... all I did was providing them with the opportunity to practice.”</p>
<b>Collaborate - Listen</b>	<p><b>Mrs B</b> “...Also, I hope to engage their memory to find the English word for each element in the picture...”</p> <p><b>Mrs H</b> “...It is easy for them to lose track of the discussion. Moreover it is a technique to bring their attention back to the lesson.”</p> <p><b>Mrs B</b> “It is important to always check if what they say corresponds to what they want to say.</p>

In their interview responses (Interviews sub-category 3 teachers’ roles in EFL class) teachers alluded to six dichotomies of roles they thought were necessary in their teaching experience. Each of the five interviewed teachers mentioned at least two of their roles simultaneously as if one necessarily involves the other. The reason why some teacher’s roles may be analysed simultaneously, is because they are often, complementary. In other words, sometimes teachers need to perform two roles in order to fulfil the same purpose in class, but they both call for different skill sets from the teacher’s part. For example, for a teacher to be a guide of lesson performance in class he/she should be a lesson planner. The teachers’ interview responses that reveal the aforementioned teachers’ roles in the EFL class are displayed in the next table

## 1.2- Teachers' opinions about their Role in the EFL Class

The interviews analysis revealed how teachers perceive their roles in the classroom within the framework of a learner-centred approach. They define their roles as follows

**a. Guiding - Lesson Planning** These two roles are complementary as one implies the other. Planning helps teachers guide students' learning process. Effectively planning lessons and designing content provides teachers with more control over lesson time and allows them to guide the learning pace in matters of how many language materials to provide learners and what questions to emphasise. The continuous implementation of these functions gives teachers the needed insight for anticipating learning difficulties, communication gaps and interaction obstacles while the lesson is in progress and helps them devise potential solutions. Moreover, while teachers use time management practices and apply orderly lesson procedures, they set good habits for learners to emulate. Over time students acquire practical learning habits. For instance, when learners are reminded of why they are given homework assignments and why they should revise lessons or prepare questions it teaches them the value of preparing for their next classes. Besides, when some tasks are performed regularly and are part of every lesson procedure, learners learn to identify task instructions faster and perform better. Thus, their own task performance acts as a guiding line for their next classroom learning experience.

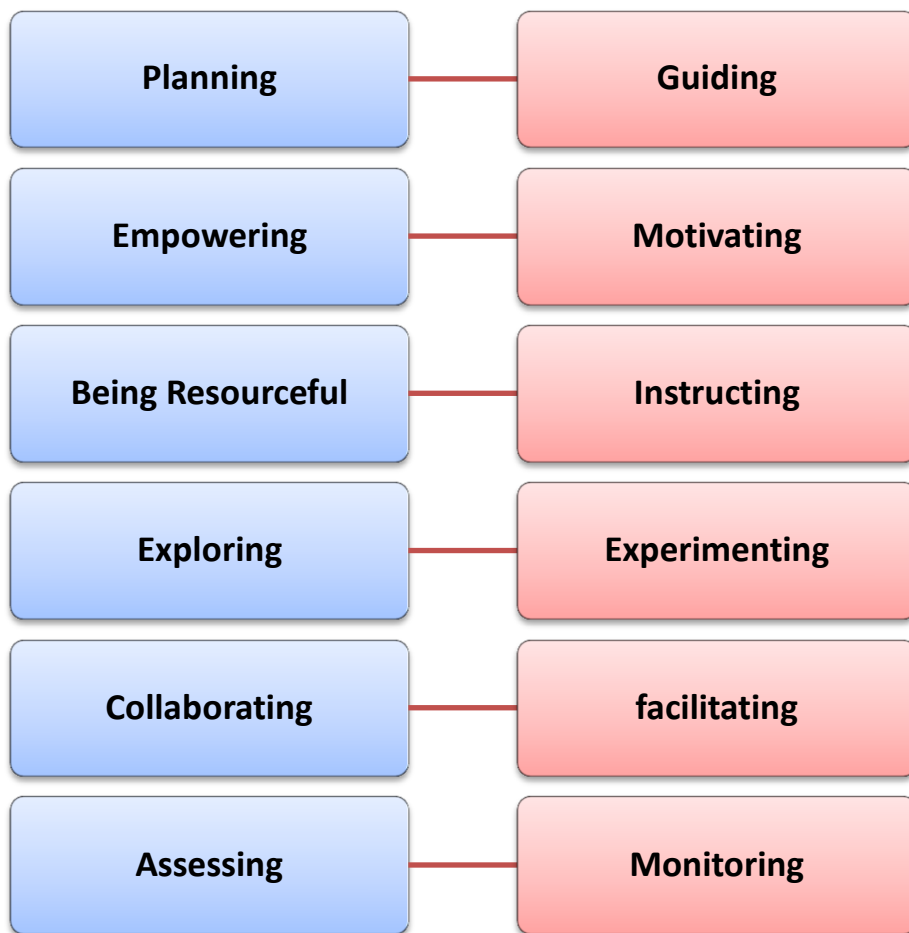
**b. Motivating - Empowering** Eliciting learners' interactions is not easy when learners do not feel confident enough to share their answers or ask their questions or feel generally incapable of making comprehensive speech in the target language. So in addition to encouraging students to participate in class and practice the target language and asking inference questions is another way to check their progress. Moreover, one way to motivate EFL learners through learning slumps and difficulties is to provide space for self expression and brain storming new ideas, while providing positive feedback.

**c. Being Resourceful – Instructing** Although lecturing time is reduced in LC-EFL class, its importance doesn't change, since lectures provide enough background for concept building. However short a lecture can be, it provides necessary language/cultural/social rules that point at how language should be performed and why. As a lecturer, the teacher provides only what the situation asks for, i.e. the specific pieces of information in reference to a particular context. For instance, as students perform individual or group work, the teacher's knowledge may be solicited for a correct use of language in the context of the task (specific cultural elements, specific word use and even, particular problem-solving methods.) In both cases the meta-linguistic function of language is called for.

**d. Facilitating– Demonstrating** To stimulate learners' interest in actively exploring new meanings rather than passively waiting for answers requires the help of teachers in their role of facilitators. In other words, teachers' ability to provide content in ways that incites curiosity and facilitate discovery by turning every learning difficulty to learning opportunity.

**e. Collaborating–Experimenting** to illicit activ participation from learners, the teachers role as collaborator is essential to Use critical thinking and logical inference to experiment with new strategies, provide effective and clear task instructions, and provide learners with different opportunities to exercise their autonomy and problem solving skills.

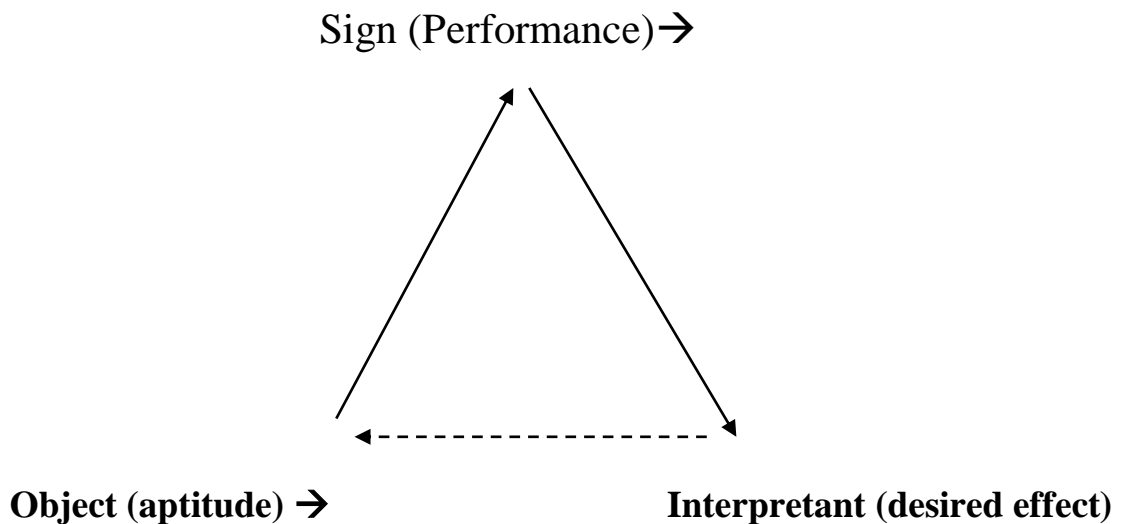
**f. Monitoring- Assessing** Assessing students’ learning progress through formative assessment can take many forms. While frequent quizzes and tests may provide opportunities for revision and remediation, they do not always reveal the most subtle learning difficulties that face learners. These, need the attentive presence of teachers in their roles as monitors, which suggests a close monitoring of their task performance and their reasoning process in inquiry. As well as active listening, which is the teacher’s tool to maintain communication with learners and to get informed about their difficulties, strengths, progress and individual learning styles? Often, teachers notice comprehension difficulties from learners’ facial expressions or their inability to answer questions about familiar topics.



**Figure 58 Teacher’s Perceived Roles in Learner-centred Teaching**

**1.3- Trichotomies of Teacher's Roles in Secondary Education Classroom**

The aforementioned dichotomies explain the relation between the teachers' attitudes and perceptions about their roles and the desired effect on EFL students, or the positive change they wish to see in students. However, they do not provide instructions on classroom practices which can relate teachers' roles to their actual implications in class and the practices that will bring about the desired effects on learning progress. In order to relate teaching practices with their motivations and results, we propose to think of teaching roles in a learner-centred perspective in terms of triads whereby actions (performance/ experience) originate from internal aptitudes and attitudes toward their roles, and motivated by specific desired effects on EFL learners. This way, teaching practices aren't randomly chosen but are the result of the purposeful intention and desired outcomes in the EFL class.



**Figure 59 The Triad of the Teacher's Complementary Roles in Class**

**Table 23 The Triadic Nature of a Teacher’s Roles in EFL Class**

The roles that teachers play in a learning-centred environment are designed to help learners become aware of their own agency and their responsibility in their own learning. The main objective of teaching is to activate the learners’ inner ability to learn and acquire essential learnings skills, within an inductive or a more complete enquiry process, where critical thinking is practiced and developed daily through T/S interactions. This is why teachers roles are three dementional in as much as they originate from the teachers inner world, in the form of their aptitudes and attitudes, then they take form through in experience through the actions that the teacher understakes, and finally, actions performed in class have desired effects on learners,.

**Table 23 Six Trichotomies of Teachers’ Roles in the EFL Class**

<b>Teacher’s Potential Attitudes and Aptitudes</b>	<b>Teacher’s Actions Actual performance in class</b>	<b>Teacher’s Goals Desired Effect on Students</b>
<b>Planner</b> (Curriculum/ Lesson Planning)	<b>Organiser</b> ( Management)	<b>Guide</b> (Guiding Learners)
<b>Empowering</b> (Inspiring/Empowering others)	<b>Prompter</b> (Prompting/ Encouraging learners)	<b>Motivator</b> (Motivating students)
<b>Being Resourceful</b> (Resourcefulness)	<b>Designer</b> (Designing Tasks )	<b>Instructor</b> (Instructing learners providing comprehensive instructions in class)
<b>Collaborator</b> (Collaborating with learners/ teach learners synergic working together skills)	<b>Explorer</b> (Exploring new explaining avenues)	<b>Facilitator</b> (Facilitating learning)
<b>Critical Thinker</b> (enquiring critically / teaching critical thinking practically)	<b>Experimenter</b> (Experimenting with new theories - Help learners experiment new possibilities)	<b>Demonstrator</b> (Demonstrating/ signifying)
<b>Monitor</b> (Monitoring)	<b>Listener</b> (Listening/ providing feed-back)	<b>Assessor/ Evaluator</b> ( Assessing learning difficulties- Evaluating learners’ performance and learning progress)

**Guiding Planner/ Organiser/ Guide** In order to guide students, teachers need to plan lessons and strategies, and organize or supervise their application in class;

**Motivating Empowering/ Prompter/ Motivator** In order to motivate learners' initiated learning teachers need to empower them with more freedom and prompt them to act;

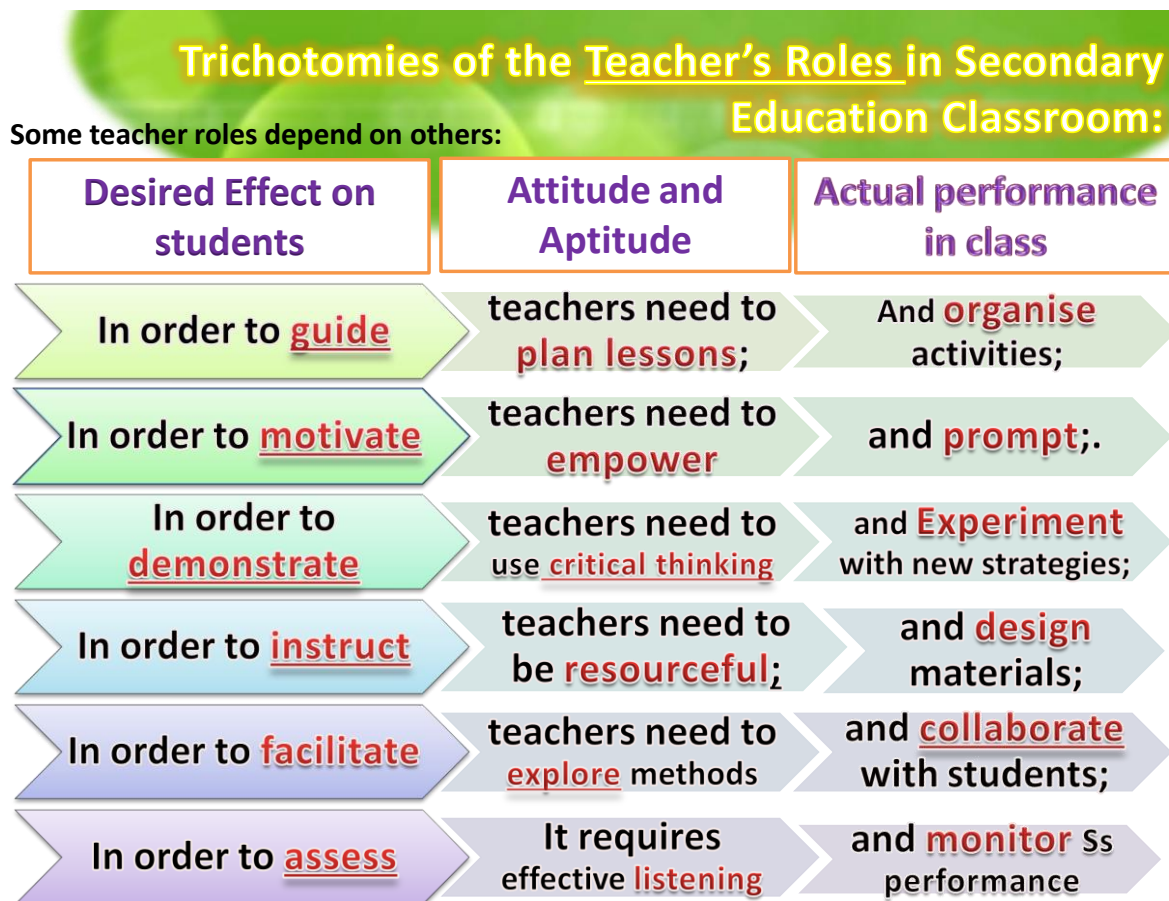
**Instructing Resourceful/ Designer/ Instructor** Teachers need to be resourceful and design adapted tasks and language materials in order to act there role of instructors. To instruct one need to be resourceful and design suitable tasks to provide clear instructions.

**Collaborating Facilitator/ Explorer/ Collaborator** In order to collaborate with learners in activities, teachers need to facilitate tasks and explore new theories and test other communicative strategies

**Demonstrating Critical Thinker/ Experimenter/ Demonstrator** In order to demonstrate meaning, i.e. explain theories, test hypotheses and experiment with new meanings teachers need to Experiment with new strategies and tasks using critical thinking skills.

**Assessing Monitor/ Listener/ Assessor/** In order to assess learning progression, teachers need to be good listeners (listen effectively to learners' spoken and unspoken responses); to monitor students' performance and difficulties.

Most of these aspects of the teachers experience cannot be performed without the students' participation. The goal is to lead the learner to for front of the learning process by preparing a learning environment inside the class, but also by closely monitoring and guiding their progress. The underlying premise of teacher effectiveness in any EFL class, which directed toward 'Learner-Centeredness' is the teacher' ability to interact effectively in any learning situation with all students. Teacher-student interaction constitutes an intrinsic component of all teachers' roles that learning a new language calls for.



**Figure 60 Trichotomies of the Teacher's Roles in Secondary Education**

**Conclusion :**

The previous section discussed the nature of classroom interactions in EFL classes. Teachers' and students' classroom talk has been analysed in terms of the nature and frequency of their utterances to determine the type of classroom interaction that is used more frequently and its functions. Results showed that teacher-student interaction takes more lesson time than peer interaction. To understand why teacher talk took over half of classroom talk time, we conducted a qualitative content analysis of teachers' utterances. The results revealed teachers' concern with prompting learners' participation and interaction. As most teachers' utterances consisted of questions, instructions or feedback. And very little time was consecrated to lengthy lecturing. The interaction patterns indicate a different approach to learning and teaching than expected. Neither was the teacher relying on a teacher-centred approach nor, did they apply a learner-centred approach in the strict sense. The research revealed that peer interaction was virtually inexistent; however, learners were allowed almost as much talk time as teachers. Knowing that teacher talk took a little over fifty per cent of talk time in all ten EFL classes, the

results were inconclusive as to what type of teaching/learning approach was applied in practice. Therefore, a qualitative analysis was conducted to investigate the matter from the point of view of the EFL teachers who have agreed to answer interview questions.

Teachers plan their classes in accordance with the Learner-Centred Approach to EFL teaching following the official syllabus. However, they are aware of the difficulties that it implies in practice, so they are ready to accommodate the learners learning pace and adapt their teaching methods and strategies even if it means borrowing from the teaching-fronted teaching paradigm. Despite the teacher talk taking over half the class time and the teaching approach used in class, we argued that teachers did not identify their teaching style as teacher fronted approach. The qualitative analysis of the transcripts revealed that the major part of teachers' utterances consisted of referential questions and instructions addressed to students with the intention of eliciting learners' participation, while only a fraction of it was dedicated to lecturing and explanation.

In the next section, we will examine the principles of LCA applied in the observed classes and whether T/S interaction is given a central place in the inductive-teaching procedures while analysing teachers' attitudes toward the inductive teaching procedures and their role in the learning progress of their students.

**Discussion Chapter II**  
**Implementing Inductive Teaching Procedures**  
**in EFL Classes**

## **Introduction**

In the previous section, it is hypothesized that S/S interactions are more frequent than T/S interactions in EFL class. However, results showed that the opposite was true. More T/S interactions were recorded in all ten classes. Moreover, the research revealed that the nature of teachers' utterances involved more questions and task instructions than answers a fact which suggested that the focus was on promoting learners' participation in most classroom interactions. Additionally, the second hypothesis stipulated that teachers tend toward an LCA to EFL teaching and apply a number of principles such as inductive teaching and focus on interaction, which ensures that teaching is centred on learning needs in opposition to a teacher-centred framework. Another teaching skill that enables teachers to build an inductive environment is his or her ability to choose and use particular techniques for presenting grammar and other language skills to learners. An example of these is the instructional techniques and other activities in which learning goals are translated into a set of tasks and actions that enable learners to "focus on the use of the language without being held back by grammatical terminology and rules that can inhibit fluency. (Goner at all, 1995, p. 129) Educational authorities recommend implementing an inductive teaching framework that provides learners with opportunities to use inference to discover language, as opposed to deductive teaching which makes learners learn facts mechanically.

This section discusses the types of teaching methodology applied in EFL classes and the place of T/S interaction in its procedures. To examine how interaction is planned and incorporated within the lesson procedure as both a goal and tool of learning, an analysis of the main inductive methods and procedures in grammar lessons is followed by a qualitative research analysis of teachers' attitudes toward inductive teaching and the role of interaction in every step.

The results are discussed in light of the theoretical premises of the inductive grammar teaching method. The results reveal that the six lesson types of lesson procedures based on the inductive model of Thornbury (2003) have been used by teachers in different lessons. The original inductive steps are summarised in the first part of this section and qualitative content analysis revealed the different variants designed and applied by teachers in the recorded classes. To examine the order and function of the inductive learning steps, he recorded grammar lessons that are analysed in terms of objectives and procedures. This section addresses the question of what inductive teaching-learning methods are applied in EFL classes.

## I- Section 1 of Discussion Chapter 2

### Teachers' Use of Inductive Teaching Procedures as Part of LCA

#### 1- Principles of the inductive learning approach

In comparison to the deductive approach which involves the transmission of language rules to learners through lecturing, the inductive approach, or the so-called rule discovery, is closer to an experimental approach to language learning. It is best described as a communicative process that involves both the learner and the teacher in an attempt to infer language rules from language materials in the context of an EFL class. In a more recent way of teaching language grammar, this approach constitutes a framework whereby students are presented with examples of the target language and led to discover its underlying grammatical structures and principles of language use, in order to be able to formulate a set of rules and prescriptions. (Purpura, 20042)

According to the tenets of this approach, learners are required to generate rules from the observation of language samples (examples or texts). In this way, as they are exposed to specific grammar instructions, they are, then asked to explain the grammar rules that was used in the context of the language they were exposed to. In line with this idea, Thornbury (1999) states that “In an inductive approach, [ and ] without having met the rule, the learner studies examples and from these examples derives an understanding of the rule” (Thornbury, 1999 49). That is to say when learners become more involved in the process of discovering the language they are better able to understand the correct usage of the grammatical structures in context. Provided that they arrive at the rule on their own, they develop their own learning strategies because language learning is the product of experience. Thornbury describes the natural way of acquiring language as inductive “...language data Induction, or learning (or input) is best processed inductively and without resource to translation” (Thornbury, 199949).

Among the four topic-based lesson types, grammar lessons offer a wider range of inductive procedures. In addition to the three basic steps brainstorming, discussing, and producing. The discovery phase is divided into other steps observation, data analysis, rule discovery, and application. Further classification of different types of grammar lessons can be made through the observation of the changes brought to this inductive framework by this research's participants.

In order to explore the lesson procedure for teaching grammar lessons and determine whether the research participants teach grammar inductively, six ways of conducting inductive grammar lessons were investigated and used as a framework of comparison. The researcher seeks to reveal the lesson steps and activities used by the EFL teachers who participated in the research to teach grammar inductively. Particular interest is given to activities that utilize and develop the students' interaction competence.

## **2- Types of Inductive Grammar Lessons**

It is accepted, among language specialists as well as educational practitioners that the teacher shouldn't disregard the fact that the use of different teaching approaches and methods increases the teacher's ability to become more effective in helping students with different learning styles and adapting to different learning contexts. Both the deductive and inductive approaches to language learning may lead to more advantages for both teachers and students. In a multi-approach paradigm to learning languages such as the learner-centred approach, the teacher is required to aim at achieving learning goals that suits the learning needs of the students. Thornbury (2003) summarized six ways to design a grammar lesson to reflect inductive learning principles. They are represented in the following tables

### **2.1. The Classification of Grammar lesson types**

Thornbury's classification of grammar lesson stages are used to compare the types of lessons the teachers had in mind and the actual performance of each lesson.

#### **2.1.1. From Texts Comprehension to Grammar Rules Induction**

**Table 24 Teaching Grammar Using Authentic Texts**

<b>Lesson procedure</b>	<b>Description</b>
<b>Step 1</b>	Title of the article Group work Predict vocabulary Check words meaning understanding Add more words from text
<b>Step 2</b>	Reading the text silently Ask gist questions Check answers Ask details questions Answer learners' questions about the text
<b>Step 3</b>	Turn the text over Examine example sentences on the board Elicit description of the difference in form between the sentences
<b>Step 4</b>	Engage in the task of finding similar examples in the text Check answers.
<b>Step 5</b>	Students cover the text They work in pairs to reconstruct the text from memory Then compare versions
<b>Step 6</b>	Ask if students had any similar experiences with the text situation Engage in the task of writing their own story Check appropriateness of learners' production structure.

Source Adapted from Thornbury, S. (1999). *How to teach grammar* (Vol. 3). Harlow Longman, p. 49, 68.

## **2- From Classroom Generated Examples to Grammar Point**

**Table 25 Teaching Grammar Using Student Language**

<b>Lesson procedure</b>	<b>Description</b>
<b>Step 1</b>	The teacher sets the topic Students take turns and constructively record a conversation about the topic The teacher provides language
<b>Step 2</b>	Transcribe the tape conversation Correct errors
<b>Step 3</b>	Draw learner's attention to features of the conversation Ask them to identify forms of sentences offer explanations on their use in context
<b>Step 4</b>	Students listen to the recorded text once more Then they engage in the written task of reconstructing the conversation from memory and adding details

Source Adapted from Thornbury, S. (1999). *How to teach grammar* (Vol. 3). Harlow Longman, p. 49, 68.

## **3- From a Set of Articles to Grammar Point**

**Table 26 Teaching Language Using Genre Analysis**

<b>Lesson procedure</b>	<b>Description</b>
<b>Step 1</b>	Teacher dictates key words to class from a newspaper article as a genre Students are encouraged to ask about the meaning of unfamiliar words A list of word pairs is derived
<b>Step 2</b>	Students' predictions are checked using other authentic texts of the same genre. (related newspaper articles) in disorder
<b>Step 3</b>	Check answers Draw attention to clues in the texts to get the accurate order of all the texts
<b>Step 4</b>	Use evidence from the texts to generate the functions of each paragraph Summarize the functions
<b>Step 5</b>	Identify language features and each paragraph
<b>Step 6</b>	Imagine the outcome of the story and write another text
<b>Step 7</b>	Teacher provides the conclusion of the story related In the newspaper articles.

Source Adapted from Thornbury, S. (1999). *How to teach grammar* (Vol. 3). Harlow Longman, p. 49, 68.

#### **4- From describing realia/ visual material to Grammar point**

**Table 27 Teaching Using Realia**

<b>Lesson procedure</b>	<b>Description</b>
<b>Step 1</b>	Contemplate the Realia
<b>Step 2</b>	Elicit descriptive sentences from learners Check learners' familiarity with the presented Realia
<b>Step 3</b>	Check the corrections of the preliminary deductions Draw attention to the structure of the generated sentences
<b>Step 4</b>	Wring activity Generate sentences according to the studied models Check answers

Source Adapted from Thornbury, S. (1999). *How to teach grammar* (Vol. 3). Harlow Longman, p. 49, 68.

#### **5- From generating meaning from a contextualised situation to grammar rules**

**Table 28 Teaching Grammar Using Generative Situations**

<b>Lesson procedure</b>	<b>Description</b>
<b>Step 1</b>	Pictures on the board or textbook Introduce character in context
<b>Step 2</b>	Provide major details Check comprehension Students tell the story using their words
<b>Step 3</b>	Elicit example sentences according to specific sentence structure Guide learners to use specific sentence form to recount their understanding Provide concepts and rules
<b>Step 4</b>	Pair activity Practice more examples
<b>Step 5</b>	Written activity Practice more examples

Source Adapted from Thornbury, S. (1999). *How to teach grammar* (Vol. 3). Harlow Longman, p. 49, 68.

**6- From discussing minimal sentence pairs to grammar structures**

**Table 29 Teaching Grammar through Minimal Sentences.**

<b>Lesson procedure</b>	<b>Description</b>
<b>Step 1</b>	Writing minimal pairs example sentences on the board Identify the difference in sentence structure
<b>Step 2</b>	Identify sentence meaning Infer rule
<b>Step 3</b>	Pair work Apply inferred rule in personal examples following previous model
<b>Step 4</b>	Check answers Correct errors

Source Adapted from Thornbury, S. (1999). *How to teach grammar* (Vol. 3). Harlow Longman, p. 49, 68.

### Summarizing Aims of Inductive Learning Lesson Procedures

Thurnbury's classification of grammar lesson stages are used to compare the types of lessons the teachers had in mind and the actual performance of each lessons in accordance to their objectives. Each objective is reached through a different learning situation which allows for the inductive process to unfold in a different way following learners' processing of the tasks.

**Table 30 Aims of Inductive Learning Lesson Procedures**

<b>Inductive lesson procedure</b>	<b>Function</b>
<b>Teaching language using genre analysis</b>	Inference of language rules from reading comprehension a set of articles. (communicative competence)
<b>Teaching using Realia</b>	Inference of language rules from discussing Realia and visual materials. (describing function)
<b>Teaching grammar using generative situations</b>	Inference of language rules from debating the meaning of situations/events in context. (pragmatic competence)
<b>Teaching grammar through minimal sentences.</b>	Inference of language rules from the examination of minimal sentence pairs /comparison of grammatical structures (comparison function for
<b>Teaching grammar using authentic texts</b>	Inference of language rules from texts comprehension (reading comprehension competence)
<b>Teaching grammar using student language</b>	Inference of language rules from classroom discussion and Students' examples

By using this analytical framework to analyse the corpus, clearer insight may be gained about the types of inductive lesson procedures are applied in various topics and how learning grammatical knowledge is affected by every teaching style.

## **II- Section 2 of Discussion Chapter 2**

### **Discussion of Analysis of Grammar Lessons from the Corpus**

#### **A- Application of the rule discovery approach's principles to the research corpus**

For each lesson, two tables are provided for this twofold analysis. The first table is a rough representation of how the lesson plan is often drafted after the textbook's framework of tasks and rubrics that deal with to the language point to be learned. This table is labelled 'Lesson Plan' followed by the number of the lesson it corresponds to. The second table is labelled "Analysis of Lesson script..." followed by the number of the analysed grammar lesson and it represents the analysis of the lesson's applied procedure in class according to the five types of inductive grammar lesson procedures .

#### **4.1. Description of Grammar Lessons Procedures and Lesson Steps**

In this section, the eight grammar lessons transcripts will be studied in terms of lesson steps to explore the inductive learning procedures used in each lesson. The grammar lessons will be analysed quantitatively and qualitatively by comparing the lesson procedures with the learning steps implemented in each lesson to explore whether they were taught inductively and to what extent are the principles of LCA respected in EFL Grammar lessons. This may help us analyse the place of T/S interactions in facilitating learners' acquisition of the grammar competence. The tables below, represent the findings of the qualitative analysis of inductive procedures of grammar lessons

**1. a. Lesson 2 Adverbs of Quantity (Transcript 02)**

**Table 31 Grammar Lesson Plan 2 Quantifiers**

Section and Rubric in Textbook	Lesson Goals and procedure
<p><b>Grammar Desk</b> Describing Water Quantities and Rising Environmental Awareness.</p>	<p><u>Type</u> <b>Grammar Lesson</b></p> <p><u>Topic</u> Environment awareness/ Water saving</p> <p><u>Language point</u> Adverbs of Quantity</p> <p><u>Key function</u> Describing Quantities</p> <p><b><u>Objective</u></b></p> <p>To write sentences using quantifiers.</p> <p>To use quantifiers with uncountable nouns and countable nouns.</p> <p><b><u>Procedure</u></b></p> <p><b><u>Phase 01 Warming up</u></b> Discussing ink levels in white-board markers</p> <p><u>Function</u> Reminding/memorizing</p> <p><b><u>Phase 02 Task assignment</u></b></p> <p><u>Function</u> Reasoning Ls comprehend task goals/ perform tasks in pairs- Teacher explains the different expressions of quantifiers and their use.</p> <p><u>Task goal</u> defining quantifiers / uncountable/countable names</p> <p><u>Task goal</u> Brainstorming/ answer checking.</p> <p><b><u>Phase 03 Practice</u></b></p> <p><u>Function</u> communicate/check/assess;</p> <p><u>Task goal</u> Discuss/ Listening and asking questions.</p>

**Table 32 Grammar Lesson Procedure -02- Quantifiers**

<b>Lesson type</b>	<b>Lesson steps</b>	<b>lines</b>	<b>descriptions</b>	<b>notes</b>
Lesson 02- Teaching the adverbs of quantity using Realia and visual materials.	Step 1 and Step 2	[01-21]	Observe  Elicit descriptive sentences from learners Check learners' familiarity with the presented realia	The teacher presents realia or visual aids in a way to be visible to all students and offers them the time and the opportunity to study it and formulate their own ideas about it.
	Step 3	[22-35]	Check the corrections of the preliminary deductions  Draw attention to the structure of the generated sentences	Checking the truthfulness of students' deductions. The teacher provides additional information about the subject, and then checks students' comprehension of meaning.
	Step 4	[36-73]	Writing activity Generate sentences according to the studied models Check answers	Students work in groups, pairs or individually to produce personalised descriptions of the object preferably without teachers' help. Then discuss learners' production collectively checking the accuracy of the descriptions and language structures.
	Step 5	[74-94]	Practice the learned rule. Then check answers.	Set different settings for the use of learned grammar structures in practice tasks/ or homework assignments. In the case of this lesson, learners are instructed to work on two textbook tasks.

The overall lesson framework reflects the progressive evolution of students' cognitive process from observation to rule discovery to a correct description in the target language. Observe- descriptive- Check- pay attention to the structure of the generated sentences - Generate sentences- Write- Check answers- then Practice. Further practice may be carried out in out of class assignment.

**2- Grammar Lesson 01- Oil Spill Catastrophe Teaching the Passive Voice (Transcript 01)**

**Table 33 Grammar Lesson Plan 01 The Passive Voice**

<b>Section and Rubric in Textbook</b>	<b>Lesson Goals and procedure</b>
<p>Unit three “Waste not Want not”- part Discovering Language- section Write it Right- page (63)</p>	<p><b>Objectives</b> Writing a press release CEO of Oil Shipping company apologises for the damages his wrecked ship has caused for locals of the coasts of Alaska.</p> <p><u>Writing Lesson</u> writing a press article;</p> <p><u>Topic</u> Apologies of an oil-shipping company’s CEO for the damages caused by his wrecked ship.</p> <p><u>Language point</u> practice the use of passive forms.</p> <p><u>Key function</u> Describing -Apologising.</p> <p><b>Objectives</b></p> <p>Ls give their opinions.</p> <p>T explains the meaning of press release</p> <p>Ls present their press release.</p> <p><b>Procedure</b></p> <p><b><u>Phase 01</u> Warming up;</b><u>function</u> Reminding;</p> <p><u>Task goal</u> Guessing and describing traditions.</p> <p><b><u>Phase 02</u> Task assignment</b></p> <p>Function Reasoning</p> <p>Task goal Listening-Brainstorming.</p> <p><b><u>Phase 03</u> Practice</b></p> <p><u>Function</u> communicate/check</p> <p><u>Task goal</u> Guess and discuss/ Listening attentively and ask questions.</p>

**B. Grammar Lesson 01- Oil Spill Catastrophe -Classroom lesson procedure 2**

**Table 34** Analysis of Grammar Lesson 02- Teaching the Passive Voice (Transcript 01)

Lesson type	Lesson steps	lines	descriptions	notes
Teaching the passive voice using a generative situation	Step 1	[1-6]	Picture on the textbook Introducing character in context	Constructing a learning situation from a picture (without a caption) and a task instruction by imagining a character. In this case The owner of an oil shipping company making apologies for the environmental accident he caused.
	Step 2	[7-48]	Provide important details Check meaning (comprehension) Students retell the situation using their own words.	Students guessed the representation of the photograph first. The goal was to get them to describe what the event has been captured in that picture then make a link to the written instruction to guess the meaning of the situation in order to make sense of what is expected of them, on their own.
	Step 3	[49-67]	Teacher elicited sentences with the specific sentence structure to be learned. Guides learners to infer the sentence form. Then remind them the rule and related concepts.	Students had difficulty expressing their understanding in correct sentences in English. But the teacher helped them both vocabulary and grammar. The grammatical rules were not provided directly. The teacher elicited memorized knowledge about the topic and examples from learners before reminding them of the appropriate rules. [60-63] starts with rule. [64-67] instructing n application exercise
	Step 4	[68-77]	Pair activity practicing more examples.	The students were given the opportunity to reconstruct their narrative using the correct grammatical constructs before being helped with the meaning and steps of the writing instruction.
	Step 5	[78-80]	Written activity using generated examples.	The writing activity Writing the press release using the formulated sentences.

In this lesson the inductive principle was applied in the first three steps. First, when asked to describe the photograph, then in imagining the story behind it then, third, in guessing what to do in the task (which is to write then present a press release as the unfortunate owner of a whisked ship.) The overall process integrated three phases of inductive learning observation, data analysis and integration, then gathering information pieces to form a coherent whole.

**3. Grammar Lesson 3 Expressing regrets and wishes (Lesson transcript 08)**

**A. Lesson Plan 3**

**Table 35** Grammar Lesson Plan 3- Using the Conditional Tense (Transcript 08)

Section and Rubric in Textbook	Lesson Goals and procedure
<p><b>Level</b> Third Year Scientific/Literary Stream <b>Teacher</b> Mrs H <b>Unit</b> Two Ill- Gotten Gains Never Prosper <b>Sequence</b> 1 Listen And Consider.</p>	<p><b>Type</b> Grammar lesson <b>Topic</b> expressing regrets and wishes <b>Objective</b> ( Expressing condition with provided /providing (that) and as long as ) <b>Textbook page</b> Around the Text (pp.47-50) Grammar Explorer - I - (p.47) <b>Learning situation</b> Discussing various examples About regrets that people might have and how they talk about them. And how they express their dreams and wishes. <b>Grammar point/function</b> using the structure ‘If only+ S+V’ and ‘I wish+S+Hadn’t+V’ <b>Procedure</b> <b>Reading/brainstorming/Rule Inference</b> <u>Step one discovery</u> using Examples (minimal peirs in students’ examples) Objective Distinction between the main clause and the subordinate one. The time they refer to is the future. <u>Step 2 production</u> Exercise 1, p 48 ( Combining Sentences ) <u>Objective Rule reminder</u> ( See Grammar Reference , p 218) Note “As long as” and “providing / provided (that)” can be used interchangeably and in initial or mid positions. <u>Step 3 practice</u></p>

	<p><u>Task 1 instruction</u> correct sentences with the sentence structures used in middle position.</p> <p><u>Task 2 instruction</u> correct sentences with the sentence structures used Initial position.</p> <p><b>Practice</b></p> <p>Grammar Explorer - II - ( p.48 )</p> <p>( Expressing wish and desire with “wish” and “it’s high time” )</p> <p>( See Grammar Reference, pp.219-220 ) Examples</p> <p><u>Type of task</u> Group work speculate on <b>if clauses</b></p> <p><u>Task goals</u></p> <ul style="list-style-type: none"> <li>- practice</li> <li>- Use of functions such as “regret, blame, advice”.</li> <li>- interact with each other in order to write endings to the if-clauses</li> </ul>
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**B. Lesson procedure 3**

**Table 36** Analysis of Grammar Lesson 3- the Conditional Tense (Transcript 08)

Lesson type	Lesson steps	Lines	descriptions
<b>Using students’ language for teaching how to express wishes and regrets using the conditional tense with “If only” and past perfect with “I wish”</b>	Step 1	[01-32]	Presenting the lesson topic and objective Informing learners about the procedure of the lesson. Assigning first task.
	Step 2	[33-161]	Managing learners discussion about the task and elicit answer checking and asking learners to argument their choice of words.
	Step 3	[33-161]	Whole –class answer while discussing the appropriate language rules.
	Step 4	[162-176] [185-187]	Practicing the correct forms and reinforcing the correct application of the grammatical rules and pragmatic rules

In this lesson a variant of the technique of using students’ language is used for teaching specific uses of the conditional tenses for teaching a grammar point. The entire lesson was a

whole-class conversation between teacher and students. The goal was to have a practice session where learners would practice in real conversations how to express their wishes and their regrets correctly in English.

Step 1 The teacher presents the topic by clearly stating the goal of the lesson at the beginning. Then, she elicits examples from her learners. Students take turns and constructively construct meaningful sentences about the topic. The teacher makes sure learners comprehend the use and function of the expressions they have produced then proceeds to provide language specifics and starts a discussion about the correct language forms and their correct use. Although, the oral interaction was given predominance, the visual and written aspect couldn't be overlooked.

Step 2 The teacher writes examples of students on the board. She asks for errors in the sentences and asks the entire class to check answers and correct errors and providing explanations.

Step 3 the teacher draws the learner's attention to features of the conversation Ask them to identify forms of sentences, offers explanations on their use in context. Every example is examined closely and together with the teacher, students discuss what is right and what is wrong in the sentence structure and meaning by referring to rules and language use. The three steps are repeated for each function (first, learners learned the correct way to talk about their wishes, then how to articulate some regrets.

Step 4 After each rule is sufficiently exemplified, students are asked to form correct sentences according to the discussed rules. Most of the later generated examples were correct. A fact that indicates learners had assimilated the lesson's goal at least partially. However, further assessment was needed to determine their use of the learned grammatical structures in other settings and written assignments.

**4. Grammar Lesson 4 Using the passive voice (Transcript 9)**

**A. Lesson Plan 4**

**Table 37 Analysis grammar lesson 4- the Passive Voice (Transcript 9)**

In this lesson the teacher combined two types of inductive techniques. She started by eliciting examples from learners and building the discussion around learners' spontaneous language (no corrections at this level) the objective was to help learners remember previous knowledge (rules on how to turn sentences from the active voice to the passive voice.).

Lesson steps	Stages of lesson types		Lines	descriptions	Notes
	Lesson type 01	Lesson type 02			
	Teaching the passive voice using minimal sentence pairs	Teaching the passive voice using generative situation approach			
<b>Step 01</b>	Stage 01		[02-19]	Writing minimal pairs example sentences on the board  Identifying the difference in sentence structure	
<b>Step 02</b>	Stage 02		[20-23] [24-62] [63-79]	Identify sentence meaning  Infer rule	
<b>Step 03</b>		Stage 01	[80-82]	Pictures on the board or textbook  Introduce character in	<b>Setting the context of the story and introduction of the main character the verb "to be" is personified as an influenced teenager.</b>

				context	(metaphor)
<b>Step 04</b>		Stage 02	[83-97]	Provide major details Check comprehension Students tell the story using their words	<b>Inferring more context details about the character (grammar rule inferred as a story detail.) (the rule is induced through cultural imagery)</b>
<b>Step 05</b>	Stage 03		[98-113]	Pair work Apply inferred rule in personal examples following pervious model	<b>Application of the rule in an activity and correction</b>
<b>Step 06</b>		Stage 04	[114-130]	Pair activity Practice more examples	
<b>Step 05</b>		Stage 05	[131-157]	Written activity Practice more examples	<b>More practice about the passive voice.</b>
<b>Step 06</b>	Stage 04		[158-161]	Check answers Correct errors	<b>Students learning the rule and applied it correctly.</b>

The next procedure required relying on students' imagination to understand the learning situation. The teacher built a story about a character "Mr be". She first she explained that for the rest of the lesson the verb "to be" will be referred to as "Mr be" who is a teenager who likes to wear a number of accessories for specific occasions. In the next step she proceeded to explain the basic passive voice tenses using a graphic design. To illustrate the rules visually to students, the teacher drew a diagram on the board and explained her method step by step. The third step she invited learners to follow the same scheme to form the correct form of the verb without looking at their usual complicated passive voice tenses chart. Although sceptical at

first, learners were surprised of their own ability to conjugate verbs into the right tenses; no matter how complicated it looked. The next step, full sentences were transformed into the passive voice and their meaning was discussed and checked. The students had acquired a handy tool for constructing correct conjugated verbs into different tenses without learning them by heart. Three main points can be drawn from this analysis. First, the teacher invested in the inductive principle of learning from examples by inviting learners to face their obstacles and try generating correct sentences in the passive voice. The pragmatic meaning of using the passive voice was discussed before tackling the grammatical aspect of the topic, second, the story the students were immersed in attractive learning situation where students were asked to imagine and make meaning out of the situation to grasp what every aspect and character refer to in the grammatical sense. A slow and gradual building of the story and the method was necessary to construct a collective understanding of the lessons' goal and content.

**5. Lesson 4 Causes and Effects of Changing Eating Habit (Lesson Transcript 4)**

A. Lesson Plan 5

**Table 38 Vocabulary/Writing Lesson Plan**

<b>Section and Rubric in Textbook</b>	<b>Lesson Goals and procedure</b>
<p>Unit 4 Safety First Advertising, Consumers, and Safety p.106 – p.134 3AS Level Scientific Stream(s) Level Third year. Expressing cause and Effect Lesson 1. Writing an expository article (pp.119-120)</p>	<p><u>Writing Lesson Topic</u> Causes and Consequences of Algerians' Changing Eating Habits</p> <p><b>Objectives</b> Write an expository article about societies changing eating habits.</p> <p><u>Key functions</u> Describing/ Prescribing</p> <p><b>Procedure</b></p> <p><b><u>Phase 01</u> Warming up</b></p> <p>Learners go through the causes and effects, and add ideas of their own./ illustrates an organizational pattern based on mind mapping.</p> <p><u>Function</u> Reminding/memorizing / Interpret/ Produce /Speaking – Writing</p> <p><u>Task goal</u> Brainstorm/ Interact</p> <p><b><u>Phase 02</u> Task assignment</b> (Pair work or individual work.)</p> <p>Homework written production to present in class, or submit to the teacher.</p> <p>Task goals .Ls comprehend Task instruction- Grammar rules and writing steps</p> <p><u>Function</u> Reasoning Select / organize / write their first draft.</p> <p>Target competencies Interpreting -Reading - Writing</p> <p><b><u>Phase 03</u> Practice</b> Students recall knowledge about language structure, and essay structure.</p> <p><u>Checking student's productions</u></p> <p><u>function</u> unction communicate/check;</p> <p><u>Task goal</u> Guess and discuss/ Listening and asking questions.</p>

**B. Lesson Procedure 5**

**Table 39- Grammar Lessons- Lesson 04**

In this lesson the goal was to help learners learn how to express cause and consequences without providing them with the linking words and expressions beforehand. The teacher adopted a strategy in six steps to bring learners from brainstorming ideas to writing a coherent short magazine article using correct language for the topic.

<b>Lesson steps</b>	<b>Stages of lesson types</b>		<b>Lines</b>	<b>descriptions</b>
	<b>Lesson type 01</b>	<b>Lesson type 02</b>		
	Teaching cause and consequence using students' language	Teaching consequence using an handout/cartoon		
<b>Step 01</b>	Stage 01		[01-34]	The teacher sets the topic Students take turns and constructively start a conversation about the topic The teacher provides language
<b>Step 02</b>	Stage 02		[35-51]	After general consent, Writing ideas from the oral conversation on the board then check for content and correct errors.
<b>Step 03</b>		Stage 01	[52-99]	Title of the article Group work Predict vocabulary Check words meaning understanding Add more words from text
<b>Step 04</b>	Stage 03		[100-117]	Draw learner's attention to features of the conversation in the satirical drawing in front of them. Ask them to identify evidence from the drawings, word definitions and

				characters dialogue to argue for their suggestions and form sentences
<b>Step 05</b>		Stage 05	[118-124]	Teacher covers the sentences on the board and ask learners to work in pairs to reconstruct the text from memory  Then compare versions
<b>Step 06</b>		Stage 06	[125-128]	Ask if students had any similar experiences with the text situation  Engage in the task of writing their own story  Check appropriateness of learners' production structure.

Step 01 Presenting the context by Eliciting learners' opinions on their daily habits. The discussion gradually builds into asking learners to describe their society's habits relying on their background historical and cultural knowledge.

Step 02 Explicit instructions presenting the task goal clearly and responding to learners' questions about the method and what is expected of them. Here the task instruction was to write a coherent text using learners' ideas. (This is the discovery stage where the context and content of the expository article is discussed collectively.)

Step 03 Incorporation of visual input in the form of cartoon distributed as handouts. The main focus of the handout is satire of some popular misconceptions about what healthy food is and what harmful behaviours they are not aware of such as nibbling on fatty and sugary processed food. This topic held learners attention and made them engaged on a personal level. The fact that helped them make sense of on the topic.

Step 04 The teachers offered her Students more time to provide more elaborate explanations on their use of certain expressions gathering contextual clues from documents.

Step 05 Practice text reconstructions from memory. Here the teacher recommended a reminder of common expressions used to express the ideas they had time expressing during their previous conversation. Step 06 Use learned expressions in personalised examples.

The most important functions targeted in the entire corpus are reading, guessing, reasoning/infering, and brain storming. These are recurrent not only in lessons with a focus on the interpretive competence such as reading comprehension and vocabulary lessons, but in those lessons that centre on the productive competence like pre-writing/writing lessons as well as grammar lessons. All these functions target the interaction competence in practice.

## Summary of the Five Steps Characteristic of Inductive Grammar Lessons

The observed grammar lessons were performed inductively by teachers and students through a number of different inductive steps. The table below summarizes the common steps of all inductive teaching styles used in the observed grammar lessons

**Table 40 The Functions of Inductive Grammar Steps Used in Class**

Inductive teaching steps		functions and objectives
<b>Step 1</b>	Presentation of the language materials (topics- words- texts- examples...) and/or Realia.	Lead learners to observe and infer meaning. It serves the meaning comprehension competence.
<b>Step 2</b>	Discussion of learners' observations and opinions	Lead learners to interact in the target language and discuss meaning in groups or with the class. It serves the interactional competence students are expected to share meaning in interaction.
<b>Step 3</b>	Checking students' opinions and answers to assess their initial understanding.	Lead learner to ck their and their classmates' answers to previous tasks. (Improving both, comprehension and interaction competencies.)
	Discovery of the lesson goals and Inference of intended rules.	Production of meaning language use rules and grammatical knowledge. (the production competence)
<b>Step 4</b>	Application of learned rules (use of acquired knowledge)	Production of language in the target language in interaction and individually. (the production competence)
<b>Step 5</b>	Checking knowledge application and corrections of the produced language.	Self-assessment and group evaluation of learning objectives (Interactional competence.)

This inductive framework was also applied to teaching other topics and language skills. The same five steps of inductive procedure were observed in another vocabulary and writing lessons. For instance in the lesson transcript 4 representing the pre-writing lesson about causes and consequences of food habits changes of society, two different techniques were used to target the same language competencies.

Table 41 General Layout of the Inductive Process applied in Lessons Transcripts

<b>Inductive stages</b>			
<b>Lesson Type</b>	<b>Brain storming</b>	<b>Discussing</b>	<b>Production Task</b>
<b>Reading comprehension lessons</b>	<ul style="list-style-type: none"> <li>- Interpretation of visual material.</li> <li>- Guessing/ inferring the text's topic.</li> </ul>	<ul style="list-style-type: none"> <li>- Reading/ Familiarizing with the text inferring the gist.</li> <li>- Discussing Vocabulary meaning.</li> <li>- Discussing the type and style.</li> </ul>	<b>Tips for writing similar text.</b>
<b>Phonetics lessons</b>	<ul style="list-style-type: none"> <li>- Eliciting example.</li> <li>- Discussing meaning of examples.</li> </ul>	<ul style="list-style-type: none"> <li>- Notice pronunciation.</li> <li>- Exploring sentence structure.</li> </ul>	<b>Practice pronunciation</b>
<b>Vocabulary/ pre-writing lessons</b>	<ul style="list-style-type: none"> <li>- Interpretation of visual material.</li> <li>- Inferring/checking meaning</li> </ul>	<ul style="list-style-type: none"> <li>- Reading/Guessing the text's topic.</li> <li>- Eliciting/ explaining Vocabulary</li> <li>- Sentence structure</li> </ul>	<b>Tips for writing about the topic</b>
<b>Grammar lessons</b>	<p>Presentation of the language materials (topics- words- texts- examples...) and/or Realia.</p> <p>Eliciting learners' observations and opinions.</p>	<p>Checking students' opinions and answers to assess their initial understanding.</p> <p>Discovery of the lesson goals and Inference of intended linguistic structures.</p>	<p><b>Application of learned rules (use of acquired knowledge)</b></p> <p><b>Checking knowledge application and corrections of the produced language.</b></p>

Summary Diagram

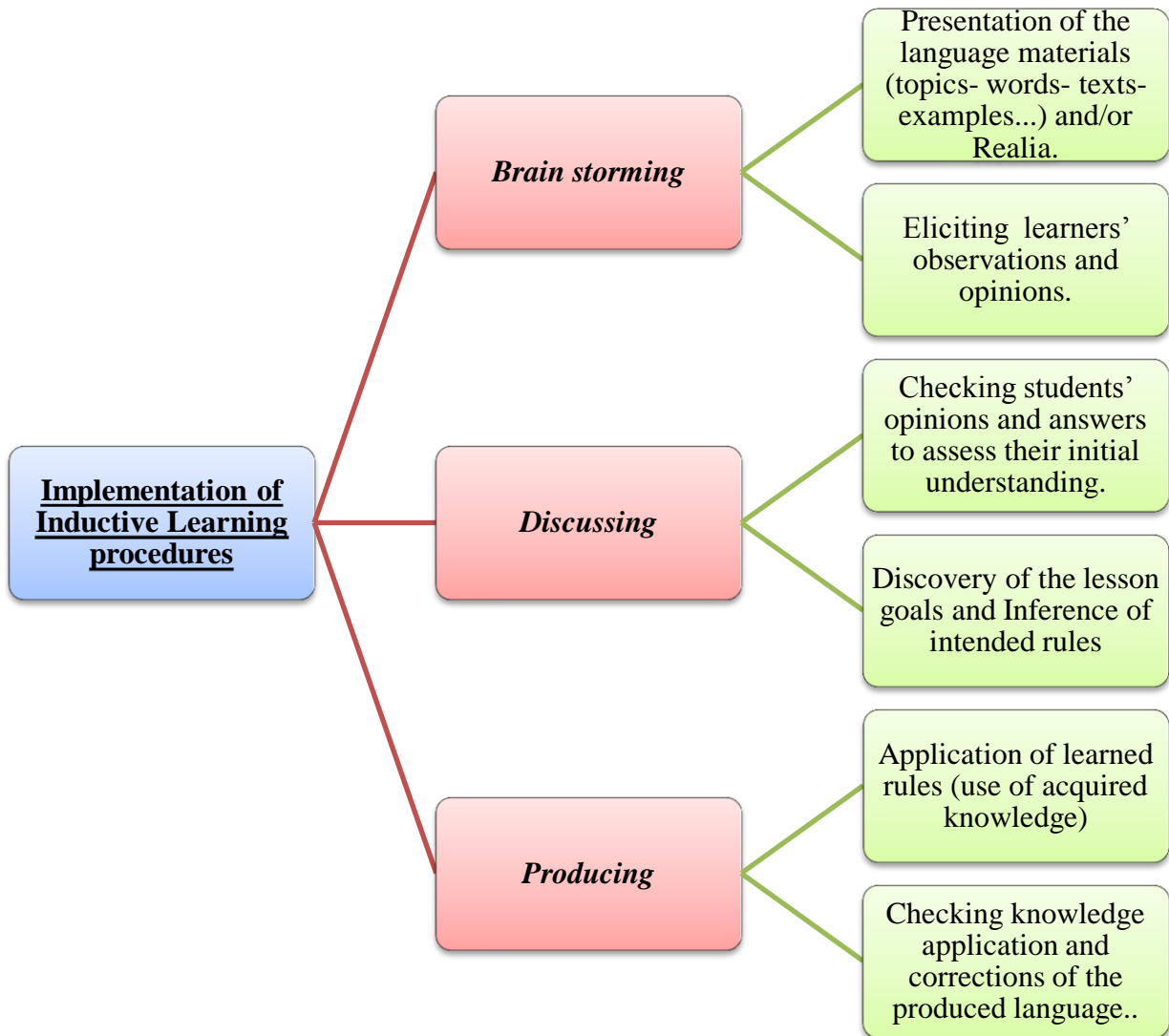


Figure 61 Indicators of the Inductive Lesson Procedures in the Observed in Classe

## **1- Teachers' Attitudes And Reasons for Applying Inductive Lesson Procedures in Class**

The major goals in EFL classes reflect the competencies that are being targeted by each task (i.e. comprehension, interaction and production competencies). These objectives are divided into a number of criteria and are used for the depiction of the interactive aspects of the plenary phases from each lesson

A number of practical indicators of the implementation of LCA may be observed during the performance of activities that are based on eliciting students' participation within an Inductive learning situations which target different competencies.

The teachers' interview analysis provides a sample of the inductive learning activities that most of the participant teachers use regularly with their students. The table below shows excerpts from teachers' answers in which they explain some of the functions of these activities and how they are in line with the inductive language teaching criteria.

**Table 40 Teachers' Opinions about the Classroom Activities that Support the Making of Inductive Inference**

<b>Inductive teaching activities</b>	<b>Question order</b>	<b>Teacher response</b>	<b>Inductive Teaching Criteria</b>
<b>Use iconic signs ( pictures and diagrams to help with learning word meaning.)</b>	<b>Lesson 10- Question 21 Ms B</b>	"I, also, find it useful to refer to the textbook pictures to remove confusion."	Discussing iconic signs
<b>Learning from texts Inferring rules of writing a journal article from studying an authentic article Cyclic learning ( different</b>	<b>Lesson 10- Question 22</b>	"Next time we will discuss the ideas and structure of the textbook article using their understanding of today's concepts and ideas."	Discussing authentic texts  Correcting written productions collectively

<b>productions from limited rules)</b>			
<b>Teacher role as a source and monitor. And use of pictures (icons) And familiar words.</b>	<b>Lesson 10- Question 23 Mrs B</b>	“...Also, I hope to engage their memory to find the English word for each element in the picture. Most of the time they are simple words that learners have certainly encountered in the past.”	Eliciting examples from students
<b>use of pictures and realia</b>	<b>Question 8 to Mrs B Lesson 04</b>	“By observing the drawing learners can easily infer the consequences of bad eating habits and thus contributing to the discussion.”	iconic signs
<b>Inference Word meaning (key vocabulary at the beginning of tasks)</b>	<b>Question 6 to Mrs H Lesson 03</b>	“I wanted to be sure that students know exactly what we are to talking about before we start the lesson.”	Discussing lesson goals and procedures (why and how to learn something).
<b>Working from examples define the concept</b>	<b>Question 5 to Mrs M Lesson 02</b>	“I prefer ask them to define the concept we just studied to know if they were listening and be sure of what they understood.”	Eliciting examples from students

According to the Learner-Centred Learning’ second principle communicative tasks for inductive learning procedure are based on the premise that learners should infer meaning from data i.e Realia, gestures, pictures, metaphors, and storytelling. Using Inference questions

A number of practical indicators of the implementation of LCA may be observed during the performance of activities that are based on eliciting students’ participation within an Inductive learning situations which target different competencies.

### **A- Discussing Teachers' Interview Answers**

In an inductive approach, the teacher first provides the target language form in the context of a meaningful situation (i.e. a story written in the form of a paragraph, a spoken dialogue, or a role play.) Then, the students are encouraged to recognize specific patterns and establish a connection between the expression and its meaning in the presented language sample. The instructor then provides tasks and manages a sequenced practice followed by meaningful explanations and eventually construction of the underlying rule of language use. Ellis proposed a number of inductive learning characteristics that “facilitate[s] the acquisition of the grammatical knowledge needed for communication.” Ellis (1992 234-238) this general framework on inductive learning led to the implementation of a number of principles in Inductive EFL classes

#### **1- Focus the learners' attention on a designed language item at a time**

While some teachers simply state the lesson's title, others prefer hinting at it and leading learners to guess the expected theme at the beginning. Mrs B clearly stated the objective and determined the language point to be discussed, right at the onset of her lessons.

In Grammar Lesson 04- where the objective was to study how to express cause and consequence Mrs B said that she chose to build on the previous lesson which offered examples of expressing cause, in an attempt to let learners use their prior knowledge to perform the tasks and learn how to express consequence. In another lesson about writing (Lesson 10) where the goal was to write a press release on refunding oil spill damages, the teacher had the same reasoning by focusing on using only the future passive to practice the function of “promising”. In both lessons, the learners' familiarity with the grammar point is used to practice specific language functions such as (expressing cause and effect and promising) besides practising the said language (linguistic) patterns. Mrs B clarifies this point by pointing out the importance for learners to be introduced to grammar and vocabulary within a familiar context which is the learning situation. The teacher recognised her role as a source in providing learning materials that carry meaning to learners such as pictures and familiar words.

**Table 41 Mrs B’s Interview Responses about Using Inductive Learning Strategie**

Question number	Interviewee’s response
<b>Lesson 04- Question 8</b>	<b>Mrs B</b> “I could have used it to beginning; it could have been another way to conduct the lesson. But, I chose to consolidate the [language] points of the previous lesson. [...]”
<b>Lesson 10- Question 22</b>	<b>Mrs B</b> “I intend to make them write a speech or an article about the same topic. Therefore, it is important to be familiar with this kind of written production.”
<b>Lesson 10- Question 23</b>	<b>Mrs B</b> “... part of my job is to provide them with extensive vocabulary which is necessary to develop their ability to describe”

**2- Providing learners’ with sufficient data which illustrate the target of the lesson**

Language rules are the inferred from data, and teachers take great care into choosing the verbal, written or visual language materials the lesson will revolve around. They provide data which illustrate the targeted feature to facilitate learners’ acquisition of language rules This kind of data acts as an anchor for learners thinking and grounds their attention of the appropriate concepts relative to the theme of the lesson, the goal is to build learners understanding of the meaning of language items/structures before /or as they discover the language items.

**Table 42 Teachers’ Responses about the Second Principle of Inductive Teaching**

Principle	activities	Evidence from teachers’ interview responses	
<b>Provide data which illustrate the targeted feature -be supplied with an explicit rule</b>	<b>Use pictures and Realia to break the ice and infer information from students</b>	Question 1 Mrs F Lesson 01	“At least students were intrigued by the photo. It played a role in raising their curiosity, I think. The fact that made them willing to try answering questions about it.”

<b>describing</b>	<b>Using cultural icons elements to convey meaning</b>	Lesson 08 The conditional present using student examples- Question 16  Mrs B	“... learners remember words (especially vague theoretical concepts) better when they are associated with things that are interesting to them.”
	<b>Provide familiar signs and gradually increase difficulty</b>	Lesson 04- Cause and Consequence Grammar- Question 9  Mrs B	“When we start by what learners already know, it is easier to encourage them to talk.”
	<b>cultural icons elements to convey meaning</b>	Lesson 04- Cause and Consequence Grammar- Question 8	<b>Mrs B</b> “The cartoon is a funny way to help student get awareness of a serious problem. Sometimes one picture can talk louder than a thousand words. [...]”
	<b>Shorter text texts</b>	Class 7 Question 13  Mrs H	<b>Mrs H</b> “It is short and accessible for student. Even though the textbook texts are well designed they are often too long and way beyond the real level of students. Sometimes I substitute them with shorter texts to suite learners needs.”
	<b>using familiar ralia and language materials</b>	Question 3 Interview with Mrs M	“[...] But most importantly I wanted to simplify the task for pupils. By using something familiar and present in the immediate context of the classroom, learners feel more confident to answer the questions.

	<b>provide them with extensive vocabulary</b>	Question 23 Class 10	<p><b>Mrs B</b> “First of all I encourage them to express themselves in English as often as possible. Also, I hope to engage their memory to find the English word for each element in the picture. Most of the time they are simple words that learners have certainly encountered in the past. If not, part of my job is to provide them with extensive vocabulary which is necessary to develop their ability to describe.”</p>
	<b>Written production to practice the learned rule</b>	Question 22 Class 10	<p><b>Mrs B</b> “I intend to make them write a speech or an article about the same topic. Therefore it is important to be familiar with this kind of written production.</p>

### **3. Helping learners to use critical thinking to infer the targeted feature**

Learners are expected to utilise intellectual effort to understand. Often, learners are expected to perform relatively well on certain tasks considered simple by teachers, it is then expected to build on this initial performance more complex tasks. However, most teachers are surprised on by learners’ difficulties early in the lesson. It may be confusing to grasp why some students are able to perform better than others in learning tasks which are specifically designed to be easy for the students’ level of instruction. When learners fail to achieve the planned objective of a task despite their critical skills, teachers step in the conversation and guide learners’ thinking but sometimes, answers are provided immediately due to time restrictions. Teachers pay attention to maintain balance between learners’ need to make their discoveries on their own and following their pace and between syllabus requirements and time limitations. Most teachers however recognise the importance of letting learners try on their own and in groups to solve their learning problems before providing any kind of assistance as a necessary step in their learning progress.

**Table 43 Teachers' Responses about the Third Principle of Inductive Teaching**

Principle	activities	Evidence from teachers' interview responses	
Learners are expected to utilize intellectual effort to understand	Working from examples	Lesson 02- Question 4 Mrs I	“I prefer working with examples first. I invite learners to use their own words to describe what they see so that I can determine what they know and what they do not.”
	Trial and error	Lesson 02- Question 4 Mrs I	“After I attract their attention to tasks and hear their answers, I provide the correct words in English. Learners remember better when they try for themselves.”
	eliciting Examples and inference of rules	Lesson 05- intonation using the inductive method- Question 10 Mrs N	“I prefer to let students think for themselves and infer the rule from the examples we discussed, alone if possible, or with my help.”
	Learners working on their own (promoting students' autonomy)	Lesson 7 Teaching vocabulary through text- Question 14 Mrs H	“Basically, all I did was giving them the opportunity to work on the text at their own pace before we collectively discuss it in the much restricted class time.”
	Sufficient language use essential for learning	Lesson 10- Question 23 Mrs B	“First of all I encourage them to express themselves in English as often as possible.”
	Tolerance to errors and failure in the learning process while	Lesson 10- Question 20 Mrs B	“Learning requires trial and error and it is the only way to engage students in their studies.”

	<b>trying.</b>		
	<b>important to try on their own</b>	<b>Mrs N-Lesson 06- Interview Response 12</b>	<p><b>Mrs N</b> “Not only I gave them the exercise as a home work but, I, also, specified that it is important to try on their own. The activity is simple but rather long.</p> <p>The goal of the activity was to help them write a full charter of rights and duties. This wasn’t the first time they encounter the model verbs that express obligation and prohibition [...]”</p>
	<b>The simple example accessible language</b>	<b>Mrs N- Lesson 05- Interview Response 11</b>	<p><b>Mrs N</b></p> <p>By integrating the student question into the lesson I achieve two main goals, first I took profit of the accessibility of the language. The example is simple enough to be understood by the whole class, which facilitates understanding the rule as well. [...]”</p>
	<b>students thinks for themselves</b>	<b>Mrs N- Lesson 05- Interview Response 10</b>	<p><b>Mrs N</b> “I prefer to let students thinks for themselves and infer the rule from the examples we discussed, alone if possible, or with my help. [...]”</p>

**4- Negotiate a common definition of acquired materials knowledge**

To articulate the rule describing the grammatical structure , many teachers share the view that it is beneficial to ask learners to articulate a concise description of the rule they learned together in order to bring everyone on the same page and help better retention of information. Learners may be asked to rephrase the learned rule in their own words as a reminder and an assessment.

**Table 44 Teacher M’s Responses about the Fourth Principle of Inductive Teaching**

Principle	activities	Evidence from teachers’ interview responses	
to articulate the rule describing the grammatical structure	Student participation in the target language summarise a point or describe a process or define a concept	Lesson 02- Question 5 Mrs I	Mrs I “Well it is always better to let learners talk about what they learned. Sometimes I ask them to summarise a point or describe a process or like today, I prefer ask them to define the concept we just studied to know if they were listening and be sure of what they understood.”

**5- Failed inference attempts make significant learning opportunities in the form of problem solving activities.**

When learners fail to infer the correct meaning, for instance, when they formulate an incorrect grammatical rule, teachers do not consider that as a unsuccessful learning process, most teachers provide more tasks to address the problem. The more learners are immersed in the discussions about the topic, the higher the chances to correct themselves and make progress.

**Table 45 Teachers' Responses about the Fifth Principle of Inductive Teaching**

Principle	Activities	Evidence from teachers' interview responses	
<b>Misunderstanding or incomplete understanding of the grammatical structure by the learners leads to clarification in the form of further data</b>	<b>Teaching strategy use students examples for avoiding time waste</b>	<b>Lesson 05- Question11</b> <b>Mrs N</b>	“By integrating the student question into the lesson I achieve two main goals, first I took profit of the accessibility of the language. The example is simple enough to be understood by the whole class, which facilitates understanding the rule as well. And second I turn students' attention back to the lesson topic, thus preventing too much waste of time.”
	<b>wrong answer it is preferable to let them try</b>	<b>Class 5</b> <b>Question10</b>	<b>Class 5</b> <b>Question10</b> <b>Mrs N [...]</b> ” even if they give a wrong answer it is preferable to let them try before providing them with the exact rule.”
	<b>Check word meaning- help them express themselves</b>	<b>Lesson 10- Question 21</b> <b>Mrs B</b>	“It is important to always check if what they say corresponds to what they want to say.

**6- Focus on one Language Structure at a Time, Simplifying Learners' Concentration**

Inductive grammar instruction draws students' attention to both grammatical forms and their meaning in context. Students' attention is focused on grammatical structures used in context so that they can perceive the language patterns in use and induce the underlying rules involved. Students learn to view grammar not just as isolated letters, words, and phrases, but also as a meaningful component of contextualized language use. (Burney, 2008 5)

During grammar lessons, teachers draw students' attention to both grammatical forms and their meaning in context by consecrate considerable amounts of time on discussing key words and to ensure that students understand task instructions and the context of the learning situation (i.e. what the examples mean, what visual materials refer to and a adequate comprehension of the written or oral story).

**Table 46 Teachers' Responses about the Sixth Principle of Inductive Teaching**

Principle	Activities	Evidence from teachers' interview responses	
attention to both grammatical forms and their meaning in context	<b>learners understand the context of the activity</b>	<b>Mrs F Lesson 01- Interview Response 1</b>	<b>Mrs F</b> "I had to make sure learners understand the context of the activity first. The instructions contained a number of words that might be incomprehensible for all students. In heterogeneous classes like this one, not all students understand at the same pace. Therefore, my goal was to bring all learners at the same level of comprehension of the task. As you noticed a few students were struggling with few words and only asked about them when I insisted of their meaning."
	<b>Practice the language items in context</b>	<b>Question 15 Class 8</b>	<b>Ms H</b> "Yes, I briefly introduced the functions of "wishing" and "regretting yesterday. But that wasn't sufficient. Learners needed additional time to practice."

	meaning of words spoken in class	<b>Question 7</b> <b>Class 3</b>	<b>Mrs H</b> “As I said I’d rather have learners be aware of the meaning of the words they use. It is easy for them to lose track of the discussion. Moreover it is a technique to bring their attention back to the lesson.”
	be aware of the topic of the lesson	<b>Class 3</b> <b>Question 6</b>	<b>Mrs H</b> “Yes, I wanted to be sure that students know exactly what we are to talking about before we start the lesson. It is better to let them be aware of the topic of the lesson beforehand.

### **III. Implantation of these Theoretical Principles though Inductive Lesson Procedures**

#### **Types of Competencies Targeted In Inductive Learning Procedures**

The interview results explain how teachers organise the process of competencies acquisition through the structure of the lesson. By structuring lessons in a three stages frameworks allowed easier practice of each learning competency, in a simple and organised way by choosing tasks which rely and teacher a specific competence of language skill.

using the inductive teaching principles within the general inductive framework. All five teachers believe that applying inductive teaching procedures enables their students to practice brain storming, interaction in the target language and as well as linguistic and grammatical competencies is written productions.

In parallel, teachers have to follow the official secondary education EFL syllabus for the sake of organising and assessing progress through units of instruction in the student’s book; these unit usually follow a specific sequencing of activities which necessitates the use of competencies for the development of specific language and learning skills. These competencies are grouped into three categories brain storming –Discussion and interaction- and production (of written messages)

**Table 47 Functions of Inductive Teaching Procedures-**

<b>Inductive Lesson procedures</b>	<b>Functions of Inductive Lesson procedures</b>
<b><i>Brain storming</i></b>	
Presentation of the language materials (topics- words- texts- examples...) and/or Realia.	The learners are provided with data which illustrate the targeted feature and they may also be supplied with an explicit rule describing or explaining the feature.”
Eliciting learners’ observations and opinions.	The learners are expected to utilize intellectual effort to understand the targeted feature.”
<b><i>Discussing</i></b>	
Checking students’ opinions and answers to assess their initial understanding.	Misunderstanding or incomplete understanding of the grammatical structure by the learners leads to clarification in the form of further data and description/explanation.
Discovery of the lesson goals and Inference of intended rules	Inductive grammar instruction draws students' attention to both grammatical forms and their meaning in context
<b><i>Production</i></b>	
Application of learned rules (use of acquired knowledge)	Learners may be required (although this is not obligatory) to articulate the rule describing the grammatical structure. to articulate the rule describing the grammatical structure.
Checking knowledge application and corrections of the produced language..	There is an attempt to isolate a specific linguistic feature for focused attention.”

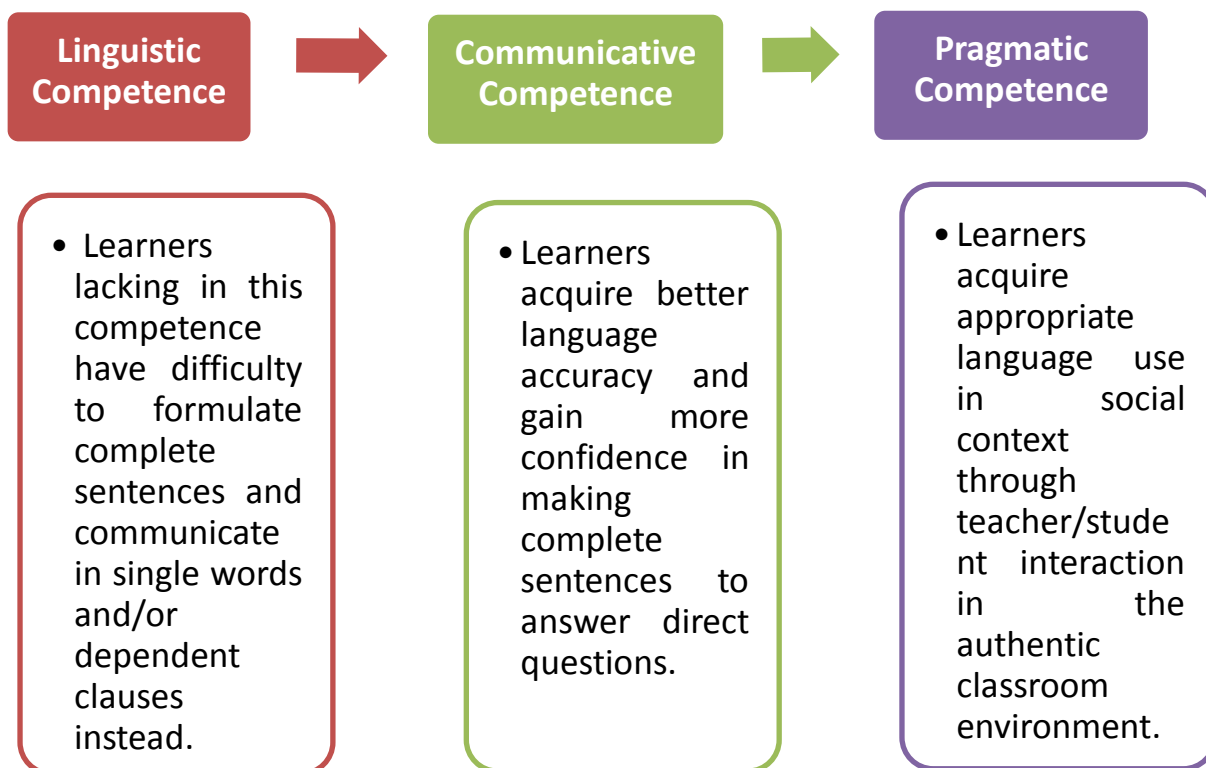
In this framework the lesson stages of brainstorming, discussing and producing are each perceived as a distinct learning phase and applied in a set of fixed and reoccurring patterns, which are represented by sequence titles in the student books such as discovering language, guess the answers to the questions, check your answers, working with words, and developing skill; each section focuses on one outcome and is said to require only one skill. However, each on these tasks may require more than one competence to reach the task goal or the unit goals. This may cause a contradiction between the task requirement and the actual competencies of the learner;

These language competencies interpreting /interacting / and producing cannot be taught in isolation from the other two; teachers interviews showed that these are general skills that students and teachers needs to have to engage in interaction and generate meaning, which leads to learning eventually. The table bellow summarises the three types of target competences in relation to the rest of the language and learning skills as they are unevenly divided in different types of inductive activities.

**Table 48 The Types of Competencies Targeted in Inductive Learning Class**

<b>Inductive Teaching Activities</b>	<b>The targeted language skills and learning competencies</b>
Eliciting examples from students	In sequences where the focus is on Comprehension and Interactional
Describing realia and visual language materials (eliciting objects descriptions)	Learners apply their interpreting and interacting skills
Discussing authentic texts and eliciting questions and answers from students	<b>Communicative Competence</b> <b>Pragmatic Competence</b>
Discussing lesson goals and procedures (why and how to learn something).	Learners use critical thinking to infer meaning (with or without the teachers' help;) this type of activity require both, the skills of interpretation, interacting (producing verbal messages.) <b>Pragmatic Competence</b> (includes communicative/ interactive competence.)
Inference of language rules 1- eliciting word meaning 2- eliciting sentence meaning	interpretation/ interaction/Production skills <b>(Linguistic/grammatical / semantic in addition to Competences)</b>
Discussing homework	Interactional/Production skills
Checking answers	<b>Linguistic/Pragmatic Competence</b>
Correcting written productions	

It is apparent from Teachers conduct lessons inductively to achieve three types of competencies in class. These competencies are meant to be acquired progressively through the three years long program. At the end of the secondary education level, learners are expected to achieve mainly three major competencies the grammatical/linguistic competence, the communicative competence (accuracy/fluency) and the pragmatic competence, usually following this order It is worth noting here, that the combination of all three aforementioned competencies is thought to lead to better mastery of the pragmatic competence which is considered the ultimate goal of the English syllabus in secondary schools. Although, it is not explicitly prescribed in the official English program, the pragmatic competence seems to be inherent to the entire EFL framework used by the teachers who took part in this research. The following diagrams shows, roughly the development of students competencies from year one up to the baccalaureate exam.



**Figure 62 Development of Pragmatic Competence in the EFL Class**

It is important to note that the competence of “interpreting” as explained in the official syllabus is the skill which allows students to infer meaning from realia and language materials in class. However, it is often thought of as a separate set of skills from interacting and producing language, needed only on the onset of lesson to help learners predict the topic of lesson. However, as it will be explained in later parts of the discussion, the interpreting competence lies at the center of meaningful learning and problem solving skills..

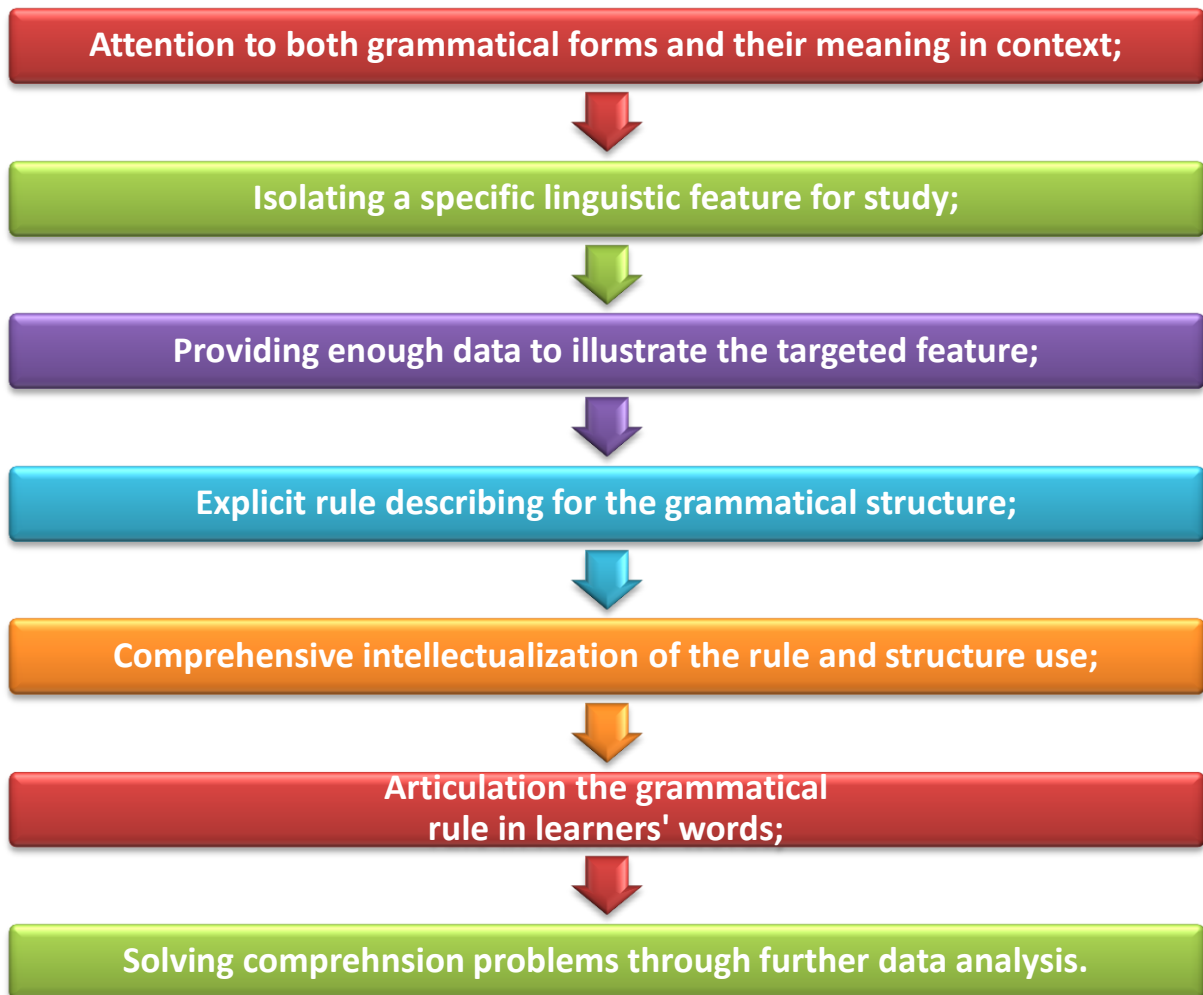
### **Conclusion :**

To answer the question of how are inductive teaching-learning principles applied in EFL classes, we hypothesised that different procedures are applied to render learning English grammar inductive for learners the analysis method applied is qualitative in nature. The lesson procedures of the recorded grammar lessons have been analysed in light of the theoretical premises of inductive grammar teaching summarised by Thornbury (2003).

Teachers’ overall goal for implementing inductive teaching principles in their EFL classes is to lead learners to actively participate in the classroom learning experience by applying basic inference skills such as observing data, comparing language materials answering questions and eventually inferring language intended language rules.

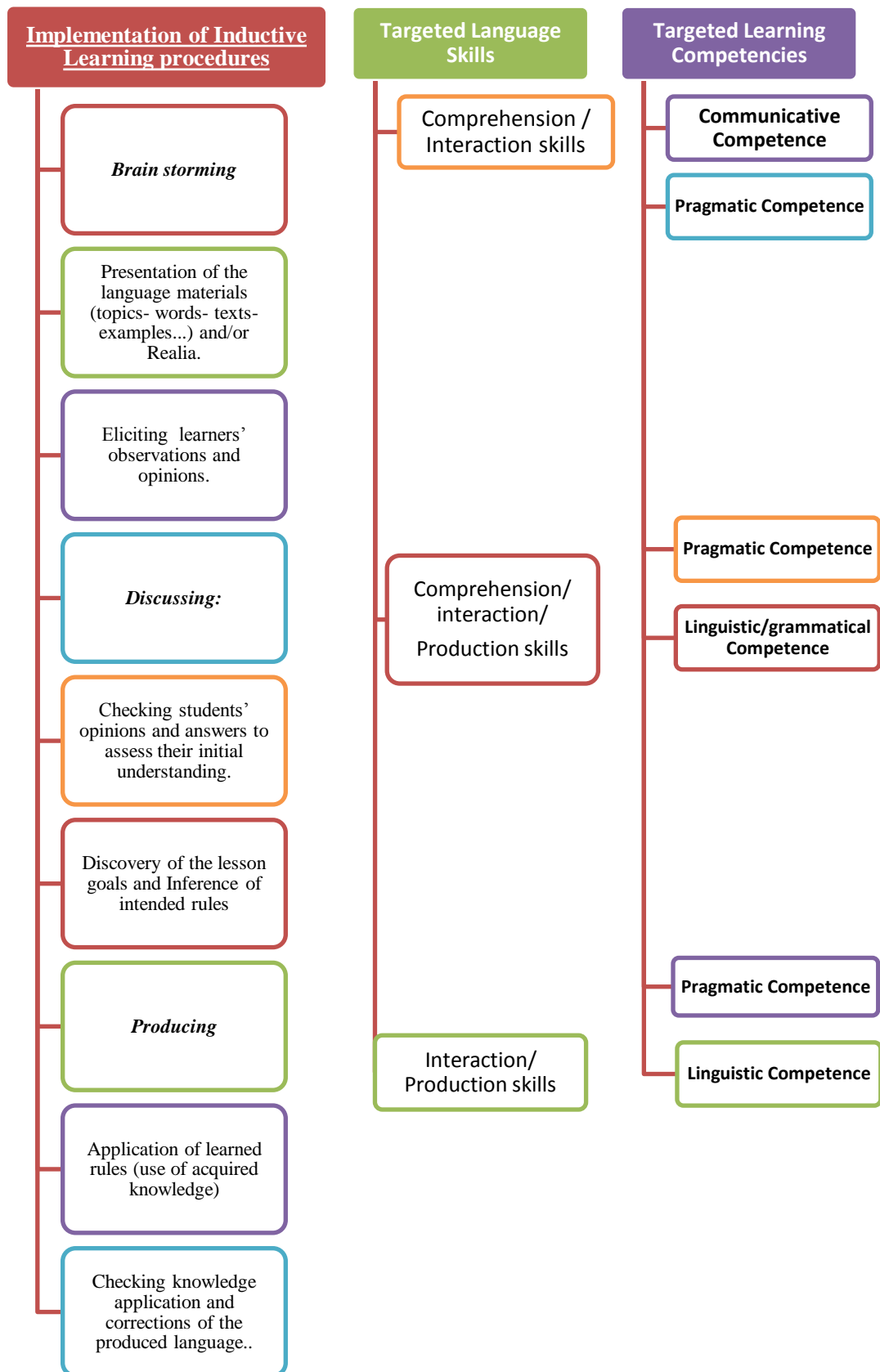
The results reveal that all six inductive lesson types were used by the teachers with noticeable variations. As discussed in this chapter, the inductive teaching procedures feature a number of learning steps that are recurrent in all variations of inductive grammar lessons. Despite the diversity of these teaching methods, students showed difficulty in performing inductive activities. Thus, teachers observed a few obstacles to reaching the learning goals fixed for each lesson. Some students had difficulty understanding the tasks instructions; others couldn't make sense of any language materials provided in the textbooks, while the most noticeable difficulty was the lack of student/student interaction the analysis showed very little and ineffective peer interaction in the target language, while, their interactions in the native language were kept minimal. The diagram below summarizes the seven reasons for using inductive teaching in EFL classes as explained by teachers.

**Figure 63 Indicators of the Learner-Centred Approach in the EFL Classes**



The teachers' objectives for choosing these inductive techniques are used to permit learners to acquire more proficiency in the three language learning competencies which allow for the developing of their pragmatic competence.

**Figure 64 Skills and Competencies Developed in Each Inductive Learning**



## **Chapter 3 of the Discussion**

### **Nature of Teacher/ Student Interaction Structures in Plenary Lesson Phases**

## **Introduction**

In this section, we seek to understand how teachers to design strategies and activities for the purpose of solving learning problems. The focus will be on drawing relations between the theoretical aspect of lesson planning and the actual performance of teaching/learning in the EFL class. And these two questions will be discussed. First, what learning phases present more difficulties for learners in EFL classes and what types of problems emerge during inductive teaching procedures? The second question is whether teachers use specific interactional strategies to help learners overcome learning obstacles in class and how they are performed in practice. Thus the first part of this section examines the teachers' views about the learning difficulties that their students struggle with the most.

We hypothesize that although students show interest in inductive learning activities they experience a number of difficulties on different levels of the lesson procedures, particularly in comprehension and interaction activities. These principles however are not always applied in the same order in actual grammar classes. Students often have difficulties performing tasks to a lack of mastery in one or more of the e learning competencies listed above. The table following table classifies the nature of inductive tasks and the difficulties encountered by students while performing them. Then, in the second part of this section, the teachers' solutions for the aforementioned dilemma are discussed by contrasting the results of the interview analysis with the content analysis of teacher/ student interactions during plenary learning phases.

### **I- Advantages and Difficulties of the Inductive Teaching Procedures**

Similarly to other approaches to EFL teaching and learning, the inductive teaching approach and the CBLT approaches to language teaching have their advantages which make them an obvious choice for EFL teaching in Algeria. Such as Promotes promoting Critical Thinking, Engaging learners' participation and encouraging the growth of the communicative and interaction competencies, while pacing the learning into manageable stages. However, they are not exempt from methodological and practical difficulties. These difficulties may become insurmountable obstacles for EFL learners in some cases for several reasons. First, it can create inequality in class. Indeed, due to student's individual differences, not everyone in the class has the same inference abilities and may reach the same conclusions at the same time, which may create discrepancies in the way learners assimilate information, and some students may feel left behind if the learning pace is kept too fast for them to follow. Second, induction tasks, and cognitive efforts, which include repetitive trial and error processes, may take a considerable amount of time. And third, inductive reasoning applied to complex subjects in a foreign language can be a serious challenge for a heterogeneous class of secondary school students. These facts make inductive teaching procedure implementation a complex endeavour for both learners and teachers.

One result of this inherent complexity is the excessive reliance on lesson planning in an attempt to control and structure every aspect of the teaching procedures. These often lead teachers to develop learning goals and expectations which are simply unrealistic in the learning experience. The truth is that lesson plans are rarely followed and the learning objectives are rarely met during the 60 minutes session of English. Consequently, students' failure to carry out inductive reasoning, perform well in the tightly structured teaching procedures, and poor progress in competency acquisition are to be expected in the secondary education EFL classes.

When teachers are asked about the types of obstacles they face on daily basis and when asked to dress a list of their student's learning difficulties. The answers often refer to one or more aspects of the teaching syllabus, learners' vocabulary level and the complexity of the inductive practices. The following table examines teachers' answers to the unstructured review questions, in which they were invited to discuss freely their teaching strategies, and what types of difficulties may have motivated their teaching choices in the classes that were observed and recorded. Teachers' interview responses are divided into three categories of themes, and topics

- 1- teachers' attitudes about the inductive teaching approaches.
- 2- Students perceived difficulties

in the inductive teaching context, and 3- the teachers' problem-solving and teaching strategies, which were designed specifically to deal with classroom interaction learning obstacles.

In this section, the last two categories are discussed in light of the results of the qualitative content analysis of the teacher's lesson plans and the practical lesson procedures in grammar, reading comprehension, and writing lessons.

### **1- Students' Learning Difficulties in the EFL Class**

The following table classifies the nature of inductive tasks and the difficulties encountered by students while performing them. In order to explore the nature of learning difficulties that prevent meaningful learning in EFL classes, the result of qualitative investigation of teachers' interviews is correlated with the previous conclusions about their teaching practices and lesson procedures. The main students' learning obstacles are deduced from teachers' classroom experiences, while the common learning phases usually applied in EFL classes are studied quantitatively and qualitatively, then they are correlated with the interviews analysis to establish the most problematic learning phases. Finally, the teachers reveal the choice of the teaching strategies and problem solving techniques that were applied and the reasons for the teachers' choices.

**Table 49** teachers' views about their Students' Learning Difficulties

<b>Variables of analysis Students' Learning Difficulties</b>	<b>Questions and Classes</b>	<b>Interviewees responses</b>
<b>Difficulty communicating in the target language</b>	<b>Question 18 to Mrs H Lesson 08 teaching the conditional present using student examples.</b>	“Yes! I was agreeably surprised to hear him produce a correct sentence related to the topic [...]”
	<b>Question 20 to Mrs B</b>	“That is because I have to lead learners to think, to gather their courage and try answering the questions addressed to

	<b>Lesson 10</b>	them.
<b>Difficulty with word meaning</b>	<b>Question 2 to Mrs F Lesson 01</b>	“As you noticed a few students were struggling with few words and only asked about them when I insisted of their meaning.”
	<b>Question 2- to Mrs F Lesson 01</b>	“In heterogeneous classes like this one, not all students understand at the same pace. [...]”
	<b>Question 21 to Mrs B Lesson 10</b>	“Sometime, learners use words they do not fully understand, or they confuse words with other words. For example, they confuse ‘cold war’ with ‘civil war’ Or ‘species’ with ‘spices’ and so on.”
<b>Difficulty understanding the meaning of task instructions. And textbook language</b>	<b>Lesson 01- Question 2</b>	<b>Mrs F</b> “I had to make sure learners understand the context of the activity first. The instructions contained a number of words that might be incomprehensible for all students.”
	<b>Question 19 to Mrs H Lesson 09 Teaching the passive through student language and minimal pair sentences</b>	“[...] Often, learners dread this specific topic [tenses in the passive voice] and perform poorly in exams mostly because of the idea that the passive voice is too complicated and too difficult to learn.”

Source Appendix one, Transcripts of Teachers’ Unstructured Interviews, page ...

Teachers described three main learning difficulties that most of their students struggle with in class. Comprehension difficulties, such as inability to comprehend what is expected of

them in a task- difficulty interacting meaningfully in the target language for instance inadequate use of words and incomplete sentences. And third, meaning-inference difficulties that string from not knowing how to conduct scientific enquiry. Difficult to achieve complex learning goals within the confines of the allotted time.

Students' participation indicates the degree of understanding of lesson content. And provide teachers with feedback from students to monitor their progress. Some students hardly participate in class. They have difficulty participating in class yet it doesn't mean that they do not pay attention. When asked specific questions they are given the opportunity to express their difficulties more clearer. Students' difficulty to participate and use the target language to interact with the rest of the lesson structure and learning progression thus it may be considered an obstacle to meaning comprehension. However, often these difficulties and periods of confusion become occasions for learning.

These types of difficulties were observed in one or more EFL classes. . Next, are a few examples from lesson scripts that depict some learning difficulties and how they impact teaching of learning goals? The first category of difficulties were observed more frequently during grammar focused lessons, while the second category of learning difficulties types were recorded during intensive interaction tasks and lesson phases, while the latter category belongs to text comprehension or brainstorming-focused lessons. The, examples are divided into three groups and commented on separately.

#### **a- Difficulty communicating in the target language in peer interaction**

When Learners encounter meaning-making difficulties, they withdraw and wait for the teacher to provide an explanation. Only a few students ask questions to the teacher, instead of discussing the problem among peers.

Ms B described a common issue in all her classes is that learners often lack confidence in asking for help and even determining the area where they need help most. Students have difficulty participating and using the target language to interact with the rest of the class.

Mrs F suggested a reason for this problem. She said that the residency in individual competencies among learners creates heterogeneous classes where not all students have the same learning pace, which causes a few learners to shy away from exhibiting the areas where they lack proficiency in front of other more proficient learners. Mrs F asserts that one of her goals in class was to provide a safe learning environment and ensures that by the end of the

session, all learners would be at the same level of understanding by listening to all students and providing formative assessment as frequently as possible emphasizing the Importance of feedback from students to monitor their progress

Mrs H points out the Importance of feedback from students to monitor their progress Lesson as eventually as time passes learners who have been reluctant to participate gradually gained enough confidence and language mastery to initiate interaction and in some instances prove that they were paying attention and were capable of the same level of inference as their peers who participate more often. The other common difficulty is learners' dread of comprehending textbook tasks and texts in the target language

### **b- Inability to read and comprehend language materials and tasks instructions**

Teachers Teachers assert that textbook goals and activities do not match the real level of students, in other words, students do not always possess the necessary learning skills and competencies through which to develop further language and pragmatic skills.

As a consequence of lacking peer interaction, learners do not often work together to the interpretation of language materials on their own. Often, learners give up making sense of new task instruction or new learning situations before they even try guessing their meaning. And that is problematic in an inductive environment that requires learners' trial and error process to reach a common agreement on the meaning and process of activities before the intervention of the teacher to provide feedback. Often, teachers find that learners are unable to start working on textbook activities, even after ample presentation of the learning situation context. These drive teachers to question the appropriateness of textbook vocabulary to the real proficiency levels of their learners and find themselves in the obligation to accompany learners' inference step by step from the task instruction to how to perform the task, while it was all explained in the target language in the textbooks. Learners experience the same difficulties in text comprehension.

Ms H thinks that textbook texts are often too long and beyond the real linguistic and pragmatic competence of students, and often feels the need to provide handouts of shorter and more accessible texts in grammar and vocabulary.

**c- Difficulty with word meaning (grammatical/ vocabulary competence)**

Mrs F said that learners struggle in reading comprehension activities and the reason is that they are often unable to retain grammar, vocabulary and syntax elements which they had seen before in previous levels of instruction. Besides, many students do not ask about the meaning of the words they do not understand because they were too many and simply wait for the teachers to explain everything. In other cases, learners make efforts to ask questions and participate but have difficulties learning vocabulary and using it appropriately., Mrs B said that in best cases, some keywords are used in the wrong context to confuse words with other words. For example, they confuse ‘cold war’ with ‘civil war’ or ‘species’ with ‘spices’ and so on. What Mrs B meant, isn’t that learners should be more proficient in the target language than their instruction level, but that they should have gained in their previous instruction years, enough vocabulary and grammatical competence to help them understand textbook texts and activities, which many teachers say is not the case with many learners in first, second and third-year students. Teachers confirm that EFL learners struggle with simple vocabulary and grammar elements and that hinders their meaning-making in class. This topic is not new. AZEROUAL (2013) asserts that students’ reading comprehension difficulties are aggravated by their linguistic shortcomings; comprehension difficulties are the results of the language deficiencies students have. Linguistic competency is what helps learners in the process of generating meaning from the text while reading. These difficulties slow learners' learning pace, affect learners’ self-confidence and reduce learners’ motivation for language learning. AZEROUA advises teachers to focus their attention on raising students' enthusiasm to learn EFL language skills by choosing interesting texts that meet their interests and suit their level in English, also considering the student’s learning needs and their practical level of language proficiency in planning learning goals, as well as focusing on enriching the students' linguistic competency in parallel with their pragmatic competency as well as implementing reading courses.

**Summary:**

The discussion of the interviews showed that teachers notice a number of recurrent learning problems that prevent learners from benefitting qualitatively from the inductive teaching procedures. These difficulties can be grouped into 3 categories. 1- Insufficient peer interaction. 2- Problems in decoding task instructions in the target language and 3- lacking inference strategies and problem-solving techniques. Despite these difficulties, however, data shows that in most classes, learners overcome these difficulties with the help of teachers, so the next question is what strategies are devised by teachers and how they invest in T/S interaction as a key teaching strategy.

**2- Analysis of plenary lesson phases**

After exploring the difficulties that arise in EFL classes, and classifying the types of student learning difficulties observed by teachers, we explore how teachers deal with communication and learning problems as they occur during class. To do this the learning stages applied in class are analyzed according to their occurrence within the applied lesson phases during each observed class. This discussion is followed by a teacher's interview analysis of teaching strategies used in class to solve learning difficulties. Particular attention is given to inductive lesson procedures used for problem-solving processes.

**2-1- The analysis of T/S interaction structures in each lesson stages**

In order to find what strategies teachers use to deal with the aforementioned learning difficulties, the teachers' opinions are triangulated with lesson structures analysis to find the lesson phases in which T/S interaction is used strategically for problem-solving purposes and establish the structures of these interaction processes. The secondary part of this section discusses the results of the comparative analysis of content analysis of T/S interactions in different lesson stages with the results of teachers' interviews analysis. The analysis of plenary phases where T/S interaction occurs starts by analysing lesson transcripts for IRF sequences, mainly the initiation/instruction task instruction/ explanation phase- response feedback. While these sequences only represent a generalised T/S interaction pattern in tasks and activities as reported by Harmer (1989), they are used as a basis for studying other possible T/S interaction patterns in different stages of learning and for different functions. In order to define the lesson

phases where T/S interaction is most needed, a mixed method was used to study the number and characteristics of plenary lesson phases and the types of interaction sequences used for problem-solving strategies. The results of this analysis are integrated with the results of teachers' interview analysis about their own teaching strategies that they think help solve learning difficulties in EFL classes

In order to determine, the type of interaction sequences that are applied in the answer-checking/ feedback learning phases, the next part of the section, will analysis the patterns of teacher/student interaction structures as they unfold in the plenary lesson phases. The main objective of this analysis is to show the relation between the different IRF cycle structures and the functions of teacher talk in T/S interactions. The following is an analysis of the effect of lesson planning on the T/S interactions in the EFL classroom.

### 1- Lesson Planning and Classroom Discourse

In order to determine how structuring lessons into different learning stages or (lesson phases) affect, the interaction patterns used by teachers in each of the phases. Lesson plans present the procedures of a lesson from start to finish, by showing the learning goals, the targeted competencies and details of tasks and instructions to be performed. Usually, a lesson procedure is divided into different lesson phases.

We conducted an analysis of the most frequent lesson procedures to account for the frequency of T/S Interaction in each lesson phase. The question addressed in this section is In which lesson phases are the T/S interaction more frequent? A number of lesson stages aim at developing the interaction competence of students, the table below shows these different lesson stages Inductive lesson phases three main learning plenary phases in EFL classes instruction-checking and lead-in.

**Table 50 definitions of plenary lesson phases**

<b>Plenary lesson phases</b>	<b>definitions</b>
<b>Instructions</b>	The teachers addresses whole class to instruct students to undertake activities or

	take part in group work
<b>Checking answers / eliciting outcomes or opinions</b>	The teacher addresses whole class to elicit answers, outcomes or opinions from students after individual work, group work or homework.
<b>Lead in</b>	The teacher addresses the whole class to introduce a new task to practice the discussed concept/ rule/ word meaning.

*Note.* Adapted from "Classroom discourse and participation in an 'English for specific purposes' context." (p.190), by Gourlay, L. J. (2003). ", PhD diss., University of Edinburgh.

## **2- Plenary lesson phases where T/S interactions occur**

The table below summarises the ten recorded lessons. It contains the description of the recorded lessons ordered in terms of their objectives, topic and procedure. The emphasis is placed on the three stages of the lesson suggested by Gourlay (2003) at the beginning of class, in the instruction phase where instructions are provided to learners and the plenary phase where most of the interactions occur. Finally, the lead-in phase when information which is indirectly related to the topic of the lesson is introduced. This generally occurs towards the end.

**Table 51** Descriptive Table of the Lesson Stages of all Ten Lesson Scripts

<b>Topic and Context</b>	<b>Procedure (lesson phases)</b>	<b>Lines</b>
<b>Class 01-Lesson 1 oil spill catastrophe</b> Second year - Literature and Philosophy - Teacher 1 ( Mrs F)	Instructions	48 58
	Plenary answers	[1-48]
	Checking	[49 – 58]

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		[59- 70]
	Lead in	41 51
<b>Class 02- Lesson 2 Quantifiers- Grammar Lesson</b>  - First year - scientific stream - Teacher 3 ( Mrs M)	Instructions	22 43 44
	Plenary answers Checking	[1-21] [23- 37] [44- 94]
	Lead in	[38 – 42]
<b>Lesson 3 oil spill catastrophe- Second year</b>  - Literature and Philosophy - Teacher 2 ( Mrs H)	Pre-plenary	
	Instructions	
	Plenary answers Checking	
<b>Lesson 4 Causes and Effects of Changing Eating Habits</b> Third year  Science Teacher 4 ( Mrs B)	Instructions	[34- 35] [51- 52] [110-113]
	Plenary answers Checking	[1- 33] [36- 50] [54- 92]

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	Lead in	19 50 [114- 120]
<b>Lesson 5 Question Intonation Grammar Lesson</b> -Second year - Scientific stream - Teacher 5 ( Mrs N)	Instructions	[72-76]
	Plenary answers Checking	[01 _05] [06 - 18] [19 -33] [35- 45] [47- 53] [59-72] [77-86]
	Lead in (spontaneous conversation)	[54-58] 39
<b>Lesson 6 Writing Right Charter second year scientific stream</b>	Planetary response checking	[01 _15] [21-25] [35-46] [48-52]
	instructions	[16-17] 37 47
	Lead in	[53-54] [26-34]

<p><b>Lesson 7 Pollution and Global Warming</b> Second year</p>	<p>Plenary answers Checking</p>	<p>[09-18] [19- 22] [23-34] [35-44] [45-65] [67-81] [82-108] [109-140] [141-146] [147-165] [166-191] [192-217] [218- 223] [224-231] 232 265 [223-228] [262-355] [357-359] [360-362]</p>
<p><b>Lesson 8 Expressing Regrets and Wishes (Grammar Lesson)</b> - Second year</p>	<p>Plenary answers Checking</p>	<p>Closed-questions response checking [133-142]</p>

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Nature of Teacher/ Student Interaction Structures in Plenary Lesson Phases Introduction:

<ul style="list-style-type: none"> <li>- Literature and Philosophy</li> <li>- Teacher 1 ( Mrs H)</li> </ul>		
<p><b>Lesson 9 The Passive Voice Grammar Lesson</b></p> <ul style="list-style-type: none"> <li>- Third year</li> <li>- Literature and Philosophy</li> <li>- Teacher 1 ( Mrs H)</li> </ul>	<p>Instructions</p>	<p>162</p>
	<p>Plenary answers Checking</p>	<p>[02-23] [24-40] [40-98] [121-138] [139-141] [158-161 ]</p>
<p><b>Lesson 10 Slave Trade third year</b></p>	<p>Instructions</p>	<p>04 [05-07] [17-18] 43 89 110 172 174 191 198</p>
	<p>Plenary answers Checking</p>	<p>[46-51] [52-88] [90-94] [95-110] 125</p>

		[117-141] [143-154] [155-162] [163-171] [184-190] [195-197]
	Lead in	161 [115-116]

### **3- Characteristics of the learning phases observed in the EFL classes**

The results of qualitative content analysis of inductive lesson phases revealed the specific ways in which inductive lessons were conducted and the characteristics of individual lesson phases) suggested a number of learning difficulties

- a- The fewer instances of non-plenary phases (suggests that learners do not work in pairs or groups very often as they were supposed to do in learner-centred classes)
- b- The very few instances of lead-in phases suggested that only a few new topics were introduced during the period of one class suggesting that only few topics are dealt with and learned in one lesson or that learning ne topic takes more time than expected.
- c- The open-question response checking phases were generally longer and exhibited more learners struggle than closed-question response checking phases

The last point suggests that most of the T/S interactions occur mostly during two plenary lesson phases a- instruction phase (discussing tasks instructions) and b- closed/ open answer checking phase (the trial/error/feedback process). In order to study the the types of Interaction structures ( IRF sequences) that take place in these learning stages, the last par this discussion section, will discuss the structures of T/S interaction using the “the IRF task sequencing of

#### **4- Two types of Types of T/S interaction patters**

##### **5.1. The debate over IRF sequences in classroom dialogues**

The concept of triadic dialogue isn't new. Much work on classroom discourse has been devoted to the IRF (Initiation, Response, Feedback) or IRE (Initiation, Response, Evaluation) structure (e.g. Sinclair and Coulthard 1975; McHoul 1978; Mehan 1979; Lemke 1985; Wells 1993; van Lier 1996; Nystrand 1997; Hall 1998; Nassaji and Wells 2000; Hellermann 2003; Gourlay 2005; Lee 2007; Waring 2009). Nassaji and Wells (2000) regard the three components of the IRF sequence as an inseparable triadic structure that serve multiple purposes in classroom discourse. They explain that teachers use this triadic dialogue "... for a wide variety of functions, depending on the goal of the activity that the discourse serves to mediate." (Nassaji & Wells 2000 376). By recognising the diversity of classroom language functions that are displayed through the triadic dialogue, they consider classroom discourse as being co-constructed between teacher and students.

Recent research has studied the possible uses of traditional IRF model of interaction in modern teaching approaches. By pointing out to the range of functions that may be fulfilled by teachers and students when engaged in the triadic structure of IRF interaction, Pinkevičienė proves that a certain degree of freedom is possible within the constraints of the traditional IRF structure. Drawing on recorded episodes of teacher-students interaction in adult EFL classroom, he demonstrated that the three-part pattern allows for spontaneous participation of students and for the incorporation of numerous variations and extensions to the initial structure of the IRF interaction model. Both teachers and students may initiate the interaction building on the basic IRF structure. (Pinkevičienė, 2011, p. 18)

In the same vein, Gourlay (2003) holds the view that teachers and students implicitly contribute to the negotiation and co-construction of classroom processes through IRF dialogues. This view is demonstrated by investigating lesson phases in which specific interaction activities and dialogues take place. According to Gourlay (2003) negotiation of classroom processes takes several forms according to the specifications of each lesson phase. Accordingly, Gourlay contends that several types of IRF cycles are at play in different parts of the lesson, and a more flexible form of the triadic sequence is displayed to provide space for normative instruction as well as for students' spontaneous contributions.

The same procedure is used in this study. The aim was to explore the lesson structures used by teachers of EFL in secondary education to indicate the nature of dialogues that occur in each lesson stage. More specifically, this section discusses the contribution of teachers and learners in classroom triadic dialogues, addressing the first research question What are the forms and patterns of teacher-student interaction in class?

## **5.2. IRF Cycles in the plenary phase**

Most teacher-student interactions happen in the plenary phase of the lesson in the form of IRF Cycles in the plenary phase, which is the heart of the lesson. The teacher usually addresses the whole class. S/he waits for the attention of all the students to start a series of Initiation, Response Feedback (IRF) cycles during which the most important points of the lesson are discussed together. Generally speaking, during the IRF episode, the teacher initiates the conversation with a question (usually referential or display questions) which is followed by a response from students to which the teacher gives feedback. However, all the IRF Cycles do not follow the exact form.

## 5- Illustrating the plenary phases from the observed classes

### A- Examples 01- lesson 01

Table 52 The Plenary Phases -Lesson 01 Excerpt 01

Data extract 01 lesson 01- plenary open- response checking

1. T Okay. What happened to the Exxon Valdez do you remember?
2. T Look at the photo. What happened?
3. Ss S1 It was wrecked off the coast of Alaska. [FSA]
4. T Yes! It was wrecked on the coast of Alaska.
5. T Do you know what does that mean?
6. Ss [SA]
7. T Look at the picture! Look at the image and tell me what happened and what is it caused by?

-----  
Plenary closed response checking

8. Ss S 2 ----- oil spil-l-ed up. [OWA]
9. T Indeed, The ship was carrying oil pointing at the black matte displayed in the photo  
Look, What happened to the beach?
10. Ss S2 Polluted [OWA]
11. T It was polluted. Just polluted? by what?
12. S2 Oil. [OWA]
13. T What happened to the Exxon Valdeaz first?
14. Ss Students reading from the book “It wrecked in the sea”. [FSA]
15. T Yes, the ship was destroyed and the oil got out and spilled on the water.

In this excerpt, the teacher attracted students attention to the photograph in the textbook and asks them to infer what they think it represents. Some students started reading the text of the activity instruction on the page. Although no caption was associated with the photograph. Students thought that the text of the activity was directly related to the photograph and

answered by reading from the book. However, when the teacher asked students to argue their answer. She patiently turned their attention back to the photograph and elicited simple descriptions of the visual clues they can find and guess what happened. Open questions were asked to help learners express their opinions. All interpretations were welcomed in the guessing stage of the activity. After answering a number of questions students could accurately produce a correct answer to the initial question, followed teacher feedback in the form of a reformulation of the student response. Because The activities' purpose was to lead learners to guess answers by inferring from visual clues. The questions asked were more from line [1- 7] fall on the open-questions spectrum. But, when students did not act as expected. they answered mechanically by reading from the textbook, but were able to explain what they read. The teacher resorted to more simple closed questions to guide Students' inference process. From line [8- 15], a more traditional IRF cycle took place. While in the beginning, students couldn't keep up with an open-response question. The closed-reponse checking phase continued following the second activity. Students were asked to reorder notes, to complete meaningful sentences the object of the photograph. A traditional IRF cycle was followed til the end of the checking plenary phase.

**B- Example 02- lesson 01**

Table 53 The Plenary Phases -Lesson 01 Excerpt 02

Data extract 02 lesson 01 plenary closed-response checking

16. T Look at the damages of oil spill, What happened to the hotels and restaurants?
17. Ss They were ... [Incomplete sentence] [IncS]
18. T they were what?
19. Ss S3 Closed [OWA]
20. T Now look again to the picture and tell me what you think happened to the fish?
21. Ss S1 Suffocated. [OWA]
22. Ss S2 Asphyxiated. [OWA]
23. T So then we can say that fish died, because they suffocated because of lack of oxygen.
24. T Okay let's recapitulate. After the Exxon Valdez apostrophe there was some damages.
25. T so what happened?
26. Ss The water is polluted. [FSA]
27. T The water "was" polluted.
28. Ss The beach was destroyed. [FSA]
29. T Yes! Everything on the beach was polluted. Did the fish survive?
30. Ss No! Died. [OWA]

The following exerts features an example of a flexible IRF cycle where students interrupted the conversation with a question.

**Example 01- extract 04**

Table 54 Data extract 04 lesson 01- instructions

Data extract 04 lesson 01- instructions
31. T In the first sentence. Fish was poisoned. And it suffocated. There was no oxygen. Now after all the damage, this ship coast, it's the owner of the company decided to send it to d what?
32. T Come on read it in the activity. -----
36. T Read again. It says here is that the owner of the shipping company.
37. Ss S1 what does it mean owner of 'sheeping' company?
38. T the owner, the man who built the company or the head of the company.
39. Ss sheepping Company? dameksa ?
40. Ss hhh.
41. T (comment? un berger)? ah you mean the ship? one ship! /fIp/ not the Sheep /fip/. c'es un bateau.

In line 36. S1 did not understand the word “owner” and mispronounced the word “shipping” his classmates mistook it for “sheep”. They were confused to what a “sheep” has to do with the topic. While the teacher was explaining the instruction of the next activity, confused students voiced their question. The conversation was directed to clearing the misunderstanding that could have affected students performance in the task. The teacher had to explain vocabulary with the required instruction. The embedded features initiated by learners and the teachers additional information are part of a flexible more unconventional IRF interaction cycle.

### 6.1. Altered IRF Cycles the flexible IRF interaction sequence

The traditional interaction structure is used mainly to ensure that learners are guided in their performance to achieve the general learning goal. (this structure mainly shows a trust in students ability to make the necessary links to build the skills needed for the attaining of the general learning goals which usually includes to learn the structure and use of metalingual knowledge and the language skill (or practical knowledge i.e. Competency) that ensures a correct use of that knowledge in context. These lesson phases reflect the inductive learning steps brainstorming- discussion-production In this process of remediation, the traditional sequence of instruction phases is flipped



*Instead, the remediating process starts when the students answers are checked for correctness, then guiding instructions are provided, then students become familiar with the new (correct) concept or piece of information. Often, additional information is briefly added on the new topic or meaning before resuming the planned activities of the lesson.*



Individual tasks in each phase were conducted following the traditional T/S interaction pattern

**(Lead-in) Initiation→Response→Feedback**

However, the interaction sequences during remediation or guiding enquiry is designed for a guiding purpose (as an interactive problem-solving enquiry process), the teacher leads a double operation. [**Investigation** (critical thinking) VS **Remediation** (representation of unknown concept)]

**Investigation** After the teacher asks a question or provide a task, he/she checks learners answers (their response) when the answer is incorrect or the task not done. And investigation process starts, through wich the teacher tries to discover the origin of the problem

**Remediation** in the sens of imediatly trying to remedy the missing information, by guiding learners toward fixing their error without (spoon-feeding them the answer). We can say that the flexible IRF sequence is revesed and takes the following order

- Student's response is assessed, so (feedback<sup>1</sup> is the srarting point)
- Then the teacher provides a guiding question or another easier task, to assess the problem. In other cases, the teacher simply reminds learners of the rule, or the meaning of a word; (instruction)
- Then the response is analysed and feed back is provided before another tasks (IRF sequence) starts

[Feedback<sup>1</sup> → Instruction → Response → Feedback<sup>2</sup>] → *Lead-in (new task or topic)*

**Summary** This sub-section of discussion section three, explores the nature of interacton patters inFirst, when students encounter a comprehension difficulty that hinders their task performance, they turn to the teacher for answers. The teacher is asked for a demonstration or further explanation, but he/she is confronted with the task of discovering the perceived problem from the learner's perceptive. To solve the problem, one needs to identify the problem. *The first operation is to investigate the meaning-gap.* Second, when the teacher recognises how the provided task or activity represent a challenge to learners, whether at the level of the instruction, the vocabulary or the execution. *The teacher has to choose a guiding strategy and check its efficiency, with the possibility of repeating the operation if needed.*

## 6.2. T/S interaction patters in each of the learning phases

The ordinary sequencing of interaction steps is initiation- response- feedback (the traditional IRF interaction sequence)

However, a flipped / modified interaction sequence was observed in the response checking phases, particularly during open-questions response checking

Response-instruction- response-feedback-initiation (flexible IRF interaction sequence was observed during long open-question response checking, where comprehension problems were discussed and solved)

Teachers often alter the shape of IRF Cycles as a strategy to adapt classroom interaction patterns to learners needs. This is done by adopting Closed-answer or open-answer checking activities. This fragment from a grammar lesson is an example of a Closed-answer checking activity

**Table 55 . Example 01- Altered IRF Cycle using closed- answer checking**

Lesson 3 <b>Grammar point -Adverbs of quantity</b>
23. T3 It's true that there is a lot of water on earth, however ...
24. Ss some?
25. T3 “on est à combien ici dans la sale? On est a trente huit?” if I say the majority of the pupils here are girls, and not boys. “Comment je vais dire” ‘ the majority’?
26. Ss “la plupart.”
27. T3 la plupart, oui! Then which adverb describes the majority?
28. Ss the most!
29. T3 the most! Very good!!
30. T3.... and...
31. Ss some
32. T3 but soon, there will be .....
33. Ss never...
34. T3 Non, ‘never’ “c’est un” adverb of frequency, we are not talking about time here. So what should we say here?
35. Ss[SA]
36. T3 Here we say none (plus rein). ‘But, soon, there will be none left for drinking’

*Source Made by the researcher*

In this segment, the teacher was also conducting a plenary closed-answer checking session with the whole class. The textbook activity consisted in choosing the right quantifier to fill in the gaps in the sentences. However, the traditional form of IRF was not respected rigorously. On different occasions, the teacher introduced definitions and explanations like in line 34 and used the French language to clarify difficult parts in lines 25 and 27. The teacher actively interacted with learners leading them to the correct answers either by providing the answer or by initiating another IRF cycle for the sake of prompting learners’ personal answers, gradually guiding them toward a better understanding of the grammar point. The teacher’s use

of IRF patterns presented more flexibility for the teacher and learners to add examples, ask other questions, and provide definitions. In the following example, the teacher asked an open question and did not hesitate to give supportive utterances. The greater IRF alteration is visible in the following example. Segment 1 from lesson 4 is an example of an Open-response Checking activity

**Table 56. Example 02-Altered IRF Cycle using open- answer checking**

Lesson 4 <b>Writing a short magazine article</b>	
1.	T4 How did eating habits change the past 10 years?
2.	Ss Silence [SA]
3.	T4 Do you know?
4.	S1 nodes no.
5.	T5 Yes? Alright then, let's start like this... answer this question first do you think our eating habits are different from the past?
6.	S1 Yes.

In this example, the teacher turned to one student and prompted her to give her own opinion. By doing so, the teacher broke the traditional order of initiation, response and feedback. When the student did not respond, the teacher encouraged her and helped her with an easier question in line 5. The teacher initiated another reference without waiting for any response. We can say that the new question was the immediate feedback of the teacher to the student's hesitation to answer.

Exploring the nature and frequency of t/s interaction different lesson phases, indeed, the goal determines the structure and function of T/s interaction. Traditional IRF and Flexible IRF both take place lesson in class during all plenary phases for instructing, checking open-questions response.

Each teacher introduced variations to the traditional IRF ritual by including explanations, word definitions and repetitions, and by allowing students the liberty to introduce their personal comments and ask their questions any time during the plenary phase of the lesson. It is worth noting that, when students do not answer a question, it is considered a silent answer [SA] that teachers seek to interpret.

**Table 57 The types of IRF interaction structures in plenary phases**

<b>Plenary response checking</b>	<b>IRF cycle structure</b>
<b>Closed-response Checking tasks</b>	<p>Characterised by ritualistic turn taking</p> <p>Minimal display questions from teachers</p> <p>Choral responses from students, mechanical answers, often includes repetition and reading from the textbook</p>
<b>Open -response Checking tasks</b>	<p>Students initiate interaction by asking questions, clarifications and/or give their opinions and correct peers.</p> <p>Additional normative instructions (explanations of tasks) from teachers in the middle students' individual or group work.</p> <p>Mini lectures, model answers and examples from the teacher.</p>
<b>Mixed-response checking</b>	<p>Combination of strict ritualistic IRF structure with more flexible structures that are characterised by more embedded elements from both participants without necessarily respecting the order of interaction steps</p>

*Note.* Adapted from "Classroom discourse and participation in an 'English for specific purposes' context." by Gourlay, L. J. (2003). ", PhD diss., University of Edinburgh.

Teachers encourage flexible IRF Cycles by leading learners to initiate conversations at any moment to ask a question, propose another answer, or solution, and reformulate ones thought or understanding of a point, self-correct or correct other learners. Open question response/ instructions/lead in/ are characteristic by a flexible type of IRF cycle. When presented by a task the students face two challenges. For one, they struggle to understand the task instruction (to know what they should do and how to do it and for what end result) this kind of challenge starts conversations of pragmatic and practical nature (this is where

immediate meaning is required, and which usually catch teachers off-guard, so to speak). And second, students must use their knowledge to solve the problem at hand ( perform the task) In order to learn something from that task in other words (they have to choose the right competence to perform the task and gain either more mastery of the competence “skill they choose to use “ or learn new ones (skills/competences) this kind of challenge requires them to understand the meaning behind the task and why the teacher wanted them to perform it is related to the learning goal of the lesson in general .

But when students fail at performing inductive tasks the teacher has to know whether it was because students had difficulty understand the task instruction and “the how to” information or students actually understood what to do and how but because of lack of one kind of competency (language or learning skill) they do not know how to perform the task (therefore, the teacher has to work on that particular competence which students lack- that also suggest to find another way to reach the learning goal either by adapting the next tasks or by setting other “intermediary” goals for learning “intermediary competencies”) (Evidence from observations students’ difficulties in learning grammar and vocabulary. See open-question response checking phases in lesson phases tables)

Next, the third category of the interviews analysis results of are discussed to highlight the teaching strategies that serve problem-solving in T/S interactions and how teachers perceive their roles in helping earners overcome their learning difficulties.

## **6- Teaching strategies used by teachers in the research**

This part of discussion section three discusses the teachers’ the three main teaching strategies that are implemented by the EFL teachers in this study

- a- Adapting tasks and language materials to the actual competencies of EFL students to meet their learning needs.
- b- Emphasising the role of T/S interaction in different inductive learning stages ( assisting learners while performing tasks by teaching learners critical thinking, scientific enquiry processes in praxtice)
- c- Implementing interactive strategies to enhance the affectivity T/S interaction to helping learners acquire communicative skills.)

**7.1. A-adapting the syllabus and inductive procedures to the students learning needs**

The following table displays the teachers’ opinions about the degree of suitability of the textbook tasks and syllabus learning goals to learner’ learning competency level, and teacher’s suggestions to bridge that gap

**Table 58** Adapting Learning Goals to Students’ Learning Needs

Goal of the activity	Evidence from Teachers’ interviews	
<b>Teaching autonomy</b>	<b>Lesson 7</b> Teaching vocabulary through text- <b>Question 14</b>  <b>Mrs H</b>	“I asked learners to read the text at home to get familiar with its ideas and to spend as much time as they need to look for the difficult words and for a preliminary understating of the topic.”
<b>Adapting textbook activities to learners competency</b>	<b>Lesson 7</b> Teaching vocabulary through text- <b>Question 13</b>  <b>Mrs H</b>	“It is short and accessible for student. Sometimes I substitute them with shorter texts to suite learners needs.”
<b>Discuss lesson topic and learning goals. To motivate learners’ interest in the learning.</b>	<b>Question 6 to</b>  <b>Mrs H</b>  <b>Lesson 03</b>	“It is better to let them be aware of the topic relate vocabulary of the lesson beforehand. This compels them to pay attention to what comes next.”
<b>Additional practice of a language point</b>	<b>Lesson 08</b> teaching the conditional present using student examples- <b>Question 15</b>  <b>Mrs H</b>	“Yes, I briefly introduced the functions of “wishing” and “regretting yesterday. But that wasn’t sufficient. Learners needed additional time to practice. The other reason is that there were a great number of absentees last time because of the snow, so it was beneficial for all the class.”

<p><b>Another way to conduct the lesson.</b></p>	<p><b>Question 9 to Mrs B Lesson 04</b></p>	<p>“I chose to consolidate the points of the previous lesson. We’ve discussed how to express habits in the past using the past simple and structure “used to”. Asking them to describe the eating habits of their ancestors is a way to make them practice their previous knowledge. Moreover [...].”</p>
<p><b>Realia in the immediate context of learning.</b></p>	<p><b>Question 3 to Mrs M Lesson 02</b></p>	<p>“[...] most importantly I wanted to simplify the task for pupils. By using something familiar and present in the immediate context of the classroom, learners feel more confident to answer the questions.</p>
<p><b>Extended Interaction with students in the task checking phase</b></p>	<p><b>Lesson 06- Question 12 Mrs N</b></p>	<p>“I thought it best to allot more time to discussing student’s answers. This way we gain valuable time to check learners’ difficulties and provide support only where it is needed.”</p>
<p><b>Start with the familiar and previous knowledge</b></p>	<p><b>Lesson 06- Question 12 Mrs N</b></p>	<p>“The goal of the activity was to help them write a full charter of rights and duties. This wasn’t the first time they encounter the model verbs that express obligation and prohibition so, all I did was providing them with the opportunity to practice. To tell you the truth I was happily surprised to see that they did quite good job.”</p>

The teachers suggested eight points to consider while designing tasks and language materials and the overall inductive lesson procedures

- 3 Teaching autonomy
- 4 Adapting textbook activities to learners competency
- 5 Discuss lesson topic and learning goals. To motivate learners’ interest in the learning.
- 6 Additional practice of a language point
- 7 Another way to conduct the lesson.
- 8 Realia in the immediate context of learning.
- 9 Extended Interaction with students in the task checking phase
- 10 Start with the familiar and previous knowledge

These points came in response to observing learners struggle with the textbook activities and the discrepancy between their actual learning needs and the recommended learning goals. In order to make learning meaningful, it needs to be adapted to learners performance level and their comprehension ability. The principle of inductive teaching being to incite learners to use the linguistic and multimodal clues to perform tasks and induce concepts and language rules. This goal becomes difficult when learners cannot make sense of the language materials they are provided. The inductive process cannot take place, when learners are given tasks beyond their actual level. This is way all the teachers agree on the fact that they have the additional responsibility to adapt the entire syllabus and text book fit the learning needs of their students.

**7.2. Emphasis on teacher-student interaction and interactional strategies**

In the following table, teachers express their opinions about the importance of T/S teaching and the different reasons they work on improving learners’ interactional competence in practice during T/S interaction.

**Table 59** Summary of teachers’ teaching strategies that focus on interaction

<b>Interactional Technique</b>	<b>Evidence from Teachers’ interviews</b>		<b>Function</b>
<b>Additional language use practice to overcome learning adversity of a language topic</b>	<b>Question 19</b> <b>“ Mrs H</b>	“My goal was to break this conviction and replace it with simple steps to render the most complex process as easy as game.”	motivation

<b>Leading-motivating students to interact. (roles motivator, and guide)</b>	<b>Lesson 10- Question 20 Mrs B</b>	“It is my job as a teacher to ensure they act in this direction... [Refers to Trying to communicate and use language in class.] ... Sometimes it is difficult to lead reluctant students to talk but with perseverance I often get positive results.”	Providing positive feedback
<b>Use of Anecdotes or jokes to illustrate a concept.</b>	<b>Lesson 08 teaching the conditional present using student examples- Question 17 Mrs H“</b>	Students remember vividly what made them laugh. It is easier to retain information we joke about. Therefore, I make sure to provide important points during these moments.”	humour-
	<b>Question 16 Mrs H</b>	“... It actually works for the simple reason that ... Michael Jackson’s famous dance move was both familiar and interesting to them.”	humour-
<b>Conveying meaning through humour</b>	<b>Question 16 to Mrs B</b>	“... Moreover, they do not always have the opportunity to see a teacher perform a dance move in class, do they?”	humour-
<b>Use students’ examples to explain a concept.</b>	<b>Question 11 to Mrs N Lesson 05</b>	“Even if student’s questions are seemingly out of topic, sometimes they turn out to be quite useful.	student generated language- Eliciting examples from students
<b>Trial and error</b>	<b>Question10 to Mrs M</b>	“[...] Even if they give a wrong answer it is preferable to let them try before providing them with the exact rule.”	student generated language-

	<b>Lesson 05</b>		Eliciting examples from students
<b>words meaning</b>	<b>Question 7 to Mrs H Lesson 03</b>	“I’d rather have learners be aware of the meaning of the words they use. It is easy for them to lose track of the discussion. Moreover it is a technique to bring their attention back to the lesson.”	Collective Checking answers
<b>Working from examples describe a process</b>	<b>Question 5 to Mrs M Lesson 02</b>	“Sometimes I ask them to summarise a point or describe a process.”	Correcting written productions collectively
<b>DEVELOPING AUTONOMY Homework (autonomy and task)</b>	<b>Question 12- to Mrs N Lesson 06</b>	“Not only I gave them the exercise as a home work but, I, also, specified that it is important to try on their own. The activity is simple but rather long.”	Discussing homework

Teacher encourage learners to produce oral or written interaction in class by Eliciting students’ participation- checking instruction understanding- checking student homework- checking students’ task performance- checking students’ answers. To help learners communicate effectively in the target language teachers rely on using

- 1- Humour
- 2- Student Generated Language
- 3- Code switching to first and second language.
- 4- Providing positive feedback
- 5- Motivating ( positive feedback)
- 6- Echoing students responses

The interaction strategies above emerge from the teachers’ opinion about their own role in guiding and structuring students learning processes while helping them overcome their learning difficulties and acquire practical learning skills (critical thinking, and pragmatic competences), while improving their competencies in the four language skills.

## **7- Correlation teachers' roles with their teaching strategies**

Teachers' concern about the implementation of inductive learning as means to improve learners' autonomy is justified by the number of difficulties that some students face when performing inductive activities. To improve their students' learning experience, teachers tried adapting some activities to fit learners' level of competence. three factors emerge as key elements in improving classroom effectiveness and maintaining the communication chain throughout the lesson period. Effective questioning (Varied forms of questions are part of every lesson step.)- Inference plan throughout the entire lesson (Mobilizing a number of tasks for a larger goal and emphasis on discussing the "why" of learning.) – Interaction (Encouraging learners to exchange and share their ideas with the teacher and the entire class.). In this chapter we provided evidence from the interviews transcripts about the teachers' strategies to make learning more effective in inductive EFL classes. The following table shows how teachers' classroom strategies stem from their understanding of their different roles within the Learner-Centred Teaching framework

**Table 60 Teachers roles and strategies**

<b>teachers' roles</b>	<b>teaching strategies</b>
<b>Instructing</b> providing effective and clear task instructions	<b>Providing learning tools pictures, cartoons and diagrams.</b>
<b>Motivating</b> eliciting learners' interactions	<b>Providing positive feedback and motivation</b>
	<b>Using humour.</b>
<b>Lectures</b> source of correct language use in context	<b>Providing examples and rules and correcting errors.</b>
<b>Listening</b> use critical thinking and logical inference to listen to learners' difficulties, strengths, progress and individual learning styles. <b>Empowering</b> teach learners how to be aware of their own learning and provide opportunities to exercise their autonomy and problem solving skills.	<b>Collaborative meaning inference</b>
<b>Guiding</b> effective planning questioning and correcting the course of learning.	<b>Adapting tasks and learning goals to the EFL class learning needs</b>

### **Conclusion:**

It has been established from this chapter that, despite the teachers' efforts to apply the principles of inductive teaching to prompt learners to actively induce and deduce meaningful information by themselves, learners' face a number of learning difficulties that prevent them from inferring meaning of the language materials discussed in class. The issues that students face while trying to make sense of the tasks within an inductive classroom environment can be summarized in three points. A- difficulty understanding task instructions, B- Lack of instruction on inference and critical thinking processes, which lead to difficulty inferring the meaning of simple language materials ( texts, words...etc.) C- Difficulty to engage in effective peer-interaction. The last part of this section has discussed the problem-solving strategies which were employed by teachers to deal with comprehension difficulties, and help learner. Analysis of the lesson procedures and the T/S interaction patterns in plenary lesson phases showed the techniques used by teachers To overcome these difficulties in the EFL classes. Throughout the entire secessions teachers placed the emphasis on T/S interaction which fulfils a bigger role in EFL instruction than the development of oral language competency of EFL learners.

**Chapter 4 of the Discussion**  
**Structure of Teacher-Guided Inquiry in EFL**  
**Classes**

## **Introduction**

The T/S interaction patterns in the lesson procedures revealed a puzzling phenomenon. Despite the re-occurring communication difficulties in classroom interactions, teachers seem to find immediate solutions to the unpredictable comprehension problems that learners face in class. This ability of the teachers, which is more likely acquired during their teaching practice rather than their formal training, tends to be overlooked by the current EFL learning and teaching authorities. The teaching strategies developed and applied by each teacher individually have been collected and analysed and explained at the beginning of discussion section 3. These difficulties and solutions performed in class provided learners with the necessary tools to make sense of the concepts they were learning.

The aforementioned positive effect of T/S interaction on students' learning progression gives rise to questions about the meaning-generating aspect of T/S interaction and the nature of the processes that enable both parts of the interaction (teachers and learners), to communicate meanings using the target language.

This fourth section of the discussion will discuss the results of the qualitative analysis of teacher-guided enquiry processes during plenary lesson phases. The goal is to uncover the role of T/S interaction in helping learners discover new meanings and the thinking processes involved in scientific enquiry in the EFL class. The results of inquiry procedures analysis are discussed in relation to the teachers' strategies in dealing with learning difficulties.

### **I. Interactional analysis of classroom inference**

The results of the qualitative analysis of the enquiry processes that take place during the T/S interactions are discussed in relation to the three modes of inference that characterise the scientific discovery process. The focus of the analysis is the three inference modes of the scientific enquiry, namely "deduction, induction and abduction" and their possible implications in educational research. While deduction and induction are fairly known as part of classroom enquiry, less is known about the Peircean notion of abduction. In this section, we examine the importance of abduction at the onset of enquiry and we propose to identify it with the part of the scientific enquire which is likely to generate new meaning. In order to study the abductive reasoning in T/S interaction in EFL classes, we borrow the inductive model of interaction analysis by Arrighi and Ferrario (2008). In the articles titled Abductive Reasoning,

Interpretation and Collaborative Processes, the researchers have analysed the inference process in everyday life conversations. They focused on identifying the abduction mode of inference and how it affected the communication between the interlocutors. Arrighi and Ferrario have explored the similarities between language interpretation and the abductive mode of (thinking) reasoning. They started by examining the details of Davidson's theory on the interpretation of natural language (1982). Then they reviewed Wirth's (1999) comparison of Davidson's interpretative theory and Peirce's concept of abduction where the ability of language users to formulate a hypothesis about the meanings that interlocutors produce in a discussion and the premise that meaning isn't a fixed construct but must be rediscovered in the context of every new interaction. Language users possess a natural ability is manifested when language users build new "plausible theories on the intentions of the other participants in the conversation" in order to predict the meaning of seemingly ambiguous and surprising use of language (Arrighi, Ferrario, 2008, p. 14).

When speakers are able to modify and revise the hypothesis depending on the information provided by the dynamic context or situation of a conversation, they are better able to perceive changes in the conversation and predict outcomes and solve problems immediately. Arrighi and Ferrario also addressed the limitations expressed toward abduction and proposed solutions to permit the full integration of abductive reasoning processes in the interpretation and analysis of naturally occurring conversations.

Traditionally, two problems are attributed to abduction as a cognitive process of generating hypotheses. First, it is permissive to all significance even those which are not pertinent to the context, and second, its non-generative feature (Arrighi, Ferrario, 2008) however, it is argued that these two features do not apply to the mode of inference of abduction as it is conceptualised by Peirce. Although it is thought to be permissive, i.e. it allows for the production of seemingly an indefinite number of hypotheses, abduction as a mode of thinking only values the most reliable hypothesis, and refers to the inference to the best possible explanation. Only the explanations which have the potential to be logically true are accepted as hypotheses. The second criticism is being non-generative, i.e. it does not prescribe how to obtain definite satisfying hypotheses, it is refutable, as no two conversations, no two speakers could be identical. Every discussion has its own constraints and specificities and it creates a unique context for a unique discussion with its unique interpretations. And authors believe that

integrating the element of interaction with the context of the conversation helps solve these problems and clarify the unique importance of abduction to meaning-making as an integrated part of the whole process of learning and discovery of meaning. (Arrighi, Ferrario 2008) The abduction as part of the three modes of inference in Peircean pragmatics is described as the only mode of thinking that is capable of generating new ideas, while both induction and deduction cannot provide additional information aside from its premises. And that makes it the inference mode of hypothesising and the first part of any logical enquiry. (see literature review section 2)

What the authors seek to demonstrate is the primordial role of the interaction of speakers with their environment and other speakers in specific situations where the goal of using language is to reach mutual understanding. Language use in these situations is supported by cognitive modes of reasoning that feed the speakers' minds with new hypotheses on the possible intended meaning of their interlocutors regardless of difficulties of communication encountered in conversation. These new hypotheses are the fruit of abductive efforts to guess what is not said but was intended by the speakers, or that has been said in a surprisingly uncommon way that is unrecognisable at first for listeners. The number and nature of these abducted hypotheses are not left undetermined or unconstrained. They are determined by the constraints of the context of the situation of speech. More precisely, the hypotheses built by language users are inspired, or more, they have been forced on their minds by their interaction with their immediate context. (Arrighi&Ferrario, 2008)

In other words, Arrighi and Ferrario argue that for speakers to successfully interpret language, they have to negotiate the meaning of what is familiar to them and what is not. This gap is generally filled with newly and instantaneously formulated hypotheses on the intended meaning. These hypotheses are often supported by the context of utterances and the participating agents. Both these correlates affect heavily the nature and number of the formulated hypotheses and can even modify them to fit the situation of language use. This view rests on the assumption that the inclusion of speakers' continuous interaction in the context of a conversation solves the problems of miscommunication and attributes to abductive reasoning the unique ability to help bring about the most suitable understanding of the most volatile instances of verbal

communication.

Considering the teacher-guided classroom interaction as a form of the scientific discovery process, we suggest that it starts with a phase of uncertainty where meaning is negotiated through abduction because language users tend to intuitively use abduction in their reasoning, even if they are not always aware of it. Arrighi and Ferrario (2008) observe that abductive reasoning is used in everyday conversations. The researchers state that when faced with cultural differences, for instance, an unfamiliar language item, speakers resort to abduction to hypothesize their interlocutor's intentions following six steps Presentation, Evaluation, Rejection, Refashion, Acceptance, and follow-up. (Arrighi, Ferrario, 2008, p.12) The phase of uncertainty generates hypotheses which are in turn tested and conclusions are drawn from the whole process.

### **I.1. Analysis of the reasoning mode of “abduction” in T/ S interactions**

When learners face difficulties related to meaning during individual or group work. Often, the problem seems to be related to their level of language mastery, which can translate into an inadequacy of background knowledge. Learners' previous knowledge of TL often proves to be erroneous, insufficient, or incomplete, preventing them from performing well in tasks or use language correctly in class. Among the functions of T/S interaction is to guide learners through an inquisitive process in which their previous knowledge is challenged and new possibilities explored in an attempt to discover new knowledge and develop new competencies. In this process, students roughly experience three stages

- 1- Surprise- doubt Gaining awareness that their knowledge may be flawed because it did not allow them to reach the expected result (learning objective on their own.)
- 2- Identification of the source of the problem following the teacher's guiding questions (supporting strategy). Implicit understanding of the teacher intermediate efforts and the overall objective.
- 3- Inference of the shared (collaborative generated meaning through teachers' guiding strategy.)

## **II.1. Results of Abductive inference analysis in T/S interaction**

In the pragmatic sense, learning new things depend on learners' competency to interpret messages and generate new meanings. In EFL classes, knowledge is gradually constructed by students when performing discovery-oriented activities. This process is usually referred to as scientific inquiry. Students and teachers construct meaning in collaboration as they both rely on one another to provide enough clues on the referent of the conversation. This collaborative inquiry offers students multiples opportunities to develop critical thinking in a non challenging way, by receiving a contextualized and reactive and interactive help from teacher.

### **A- Teacher's Classroom Inquiry Steps**

Teachers and learners apply abductive logic to generate temporary hypotheses about each other's intentions in interaction. In order to understand the reasons for these alterations to the IRF cycles and the inclusion of more information in classroom discourse, we turn to the abductive inference model of conversation, bearing in mind that the teacher interacts with novice learners of English.

In addition, the English language is at the same time the target and the medium of instruction language in EFL classes. Teachers are aware of the learners' limitations and carefully choose the utterances they address students with.

Teachers often adapt abductive reasoning to find out the best classroom procedure to choose, in order to fit activity goals and to match the learners' needs during classroom interaction. Put differently, teachers use abductive thinking to evaluate the learners' level of comprehension to accommodate their teaching methods. Teachers' classroom inquiry contains three main parts identification of the problem students face, generation of the hypothesis that might explain it, and finally checking the validity of the hypothesis and then testing its accuracy. Earlier in the discussion, the inductive activities proposed in EFL classes contain three major learning phases brain-storming, discussion- and production these steps are found during the enquiry processes. This triadic process corresponds to the three parts of scientific enquiry (that includes abduction at the initial point.)

1. Assumption Old belief
2. Surprise/Doubt old belief
3. Hypothesis Students formulate temporary hypothesis (generating new belief)
4. Testing the hypothesis Expressing a new belief.

5. Fixation of a new belief.
6. Agreement on the shared belief

The process of doubt and belief fixation is based on hypothesising, trial and error similarly to the scientific enquiry process where meaning is discovered/ inferred through critical thinking rather than being mechanically learned by heart.

Stage one assumption the teacher assumes that a word is easy and that students have already acquired its meaning. In case of tasks, the teacher would assume that students have already dealt with similar tasks in the past.

Stage two Surprise/Doubt A surprising fact contradicts the teacher's assumption. When a student gives an incorrect answer, or when the word or task doesn't mean anything for learners, the teacher faces a moment of surprise causing him or her to doubt the initial assumption.

Stage three Hypothesising faced with the surprising fact, the teacher will try to understand why the planned activity or part of speech was interpreted in unpredicted way. Here the teacher tries to assess whether the student has simply made a mistake or that it is an error in the language competency of the learners that should be amended with an entire remediation learning sequence. In other words teachers try to identify the problem i.e. understanding the nature of students 'belief'. By 'belief' we mean the incorrect rule, or misconception about a language element, that lead learners to perform poorly in a task, or confuse the meaning of a word.

**Stage four Testing the hypothesis** By asking students questions about their answer, the teacher examines the student's responses to confirm the hypothesis, if the problem was as expected she / will try another activity or rectify the incorrect 'belief'.

Stage five Remediation Once the hypothesis is confirmed and the problem identified the teacher chooses the teaching strategy best suited to help the learner notice and self-correct their mistake. In other cases, the teacher either adapts a more suitable activity or chooses another lesson goal entirely.

Stage six Evaluation Evaluating the efficacy of the strategy. If the remediation step is successful, it means that learners a new belief that may be translated into a new habit of thought (acquisition of word meaning, a grammar rule, and a problem solving strategy.) Then, the teacher confirms the learners' conclusion by providing positive feedback.

The same process takes place, when the learner is confronted with a challenging task, question, or a new word. While directed by teacher’s questions and prompts, the learner produces temporary hypothesis of what could the correct answer could be, and tries voicing his/ her conclusions until the teacher approves of the correct answer. Students then confirm and integrate the new information.

**B- Examples of Abduction inference in the classroom**

This example illustrates how the teacher concluded that a change in her strategy was necessary, after testing the hypothesis she had built at the beginning of the conversation with the learners.

**Table 61 Example 01 of Classroom Abductive Reasoning**

Lesson 1 <b>Using the future passive for writing a press release</b>
1. T1 Okay. What happened to the Exxon Valdez do you remember?
2. T1 Look at the photo. What happened?
3. S1 It was wrecked off the coast of Alaska,
4. T1 Yes! It was wrecked on the coast of Alaska. Do you know what does that mean?
5. Ss [SA]
6. T1 Look at the picture! Look at the image and tell me what happened and what is it caused by?
7. S2 Oil spilled up.
8. T1 Indeed, the ship was carrying oil pointing at the black matte displayed in the photo. Look, what happened to the beach?
9. S1 Polluted
10. T1 It was polluted. Just polluted? By what?
11. Ss Oil.
12. T1 Yes, then what happened to the Exxon Valdez first?
13. Ss Reading from the book “It wrecked in the sea”.
14. T1 Yes, the ship was destroyed and the oil got out and spilled on the beach.

*Source Made by the researcher*

***1.1.1. Abductive Reasoning from the Teacher's Perspective***

a) **Assumptions** The teacher assumed that learners would easily understand the sentence they read on the textbook. “The Exxon Valdez wrecked at the coasts of Alaska.”

b) **Surprising fact** But she was surprised by the automatic and uncertain response of learners, which led her to doubt they actually did know what it meant.

c) **Hypothesis** She hypothesised that the meaning of the sentence might not be obvious for learners.

d) **Testing of the hypothesis** She tested her hypothesis by asking a series of questions about the situation described in the activity.

e) **Confirming the hypothesis** Based on learners' silent response, the teacher understood that they couldn't comprehend the contextual situation of the activity. Thus, she remediated to that problem before resuming the activity.

***1.1.2. Abductive Reasoning from the Learners' Perspective***

a) **Assumption** Learners presumed there was a link between the teacher's request to open the book and the question. They had a vague idea that the answer was somewhere in a caption in the page right below the picture! Thus, they answered by reading the caption.

b) **Surprising fact** The teacher was not satisfied with the simple answer and asked for more details, which turned out to be a more complex task.

c) **Verifying the hypothesis** Learners waited for more instruction or explanation from the teacher. The teacher's next questions were centred on the picture. Learners could easily identify the black sticky substance that covered the beach as being “oil” and they formulated the hypothesis by deducing that the oil was on board the ship named “the Exxon Valdez”, and that something must have happened to the ship which led to the spread of the oil on the beach.

d) **Confirmation** The teacher's last assertion confirmed that learners' understanding matched that of the teacher.

When both teachers' and learners' initial hypotheses are tested and confirmed a temporary common ground is reached and both parties are clear about what they are talking about or the referent of the conversation. Only at this moment, can it be said that learners “understand” the teacher's intended meaning. Additional meanings can be built henceforth, and the sum of these moments of accord constructs a meaningful lesson. The same process may be applied to instructions and tasks as they are considered meaningful utterances to negotiate. The

results presented above are discussed according to the semiotic framework. According to the branch of semiotics that is concerned with education, the English language teacher is a significant component of the EFL classroom (Stables & Semetsky, 2014). The way in which the lesson is actually performed in class depends primarily on the teacher's styles and thinking strategies. The teacher's ability to be attentive to learners' responses to lesson content and to react effectively is what ensures effective and meaningful language learning. As the data show, meaningful interaction between the teacher and students was intrinsically connected to the way both parties received and processed each other's utterances. A closer look at classroom dialogues has revealed that they take the form of short investigations undertaken to reach a common ground on which to build meaning. The process of building meaning is subject to other pragmatic considerations such as context and the learner's background knowledge. In this section, a semiotic analysis of teacher-learner interactions is undertaken. A few classroom dialogues are analysed following the model constructed by (Nöth, 2014).

The goal is to show how learners' previous knowledge influences the way they respond to new information and how the teacher can turn this into a learning advantage. The study reveals that teachers use two recurring learning strategies. The next example is an extract from the same lesson as in table 5 but performed by a different teacher. The two examples are contrasted. Their similarities and differences will be discussed next..

**Table 62. Example 02 of Classroom Abductive Reasoning**

Lesson 2 <b>Writing a press release</b>
1. T1 Today we're going to deal with something else. When two cars collide, what do we have?
2. S1A collision
3. S2 An accident
4. T1 Yes! An "accident" or "collision"
5. T1 Now when you have the same accident in the air, this time, when two planes have an accident what do we call it?
6. S1 A crash.
7. T1 Good! Write it on the board. (The teacher called the student to the board)
8. T1 And what if it happens in water, in the sea?
9. S3 A crash.

10. What do you call an accident between two ships? ... a crash?
11. S3 "Un naufrage".
12. T1 Ok! We just called an accident in the sky a crash, but when it happens in the sea, it is called a "wreck" or "wreckage".
13. All right then, when an accident happens in the sea or the ocean, it is called a 'wreckage'. So for today we're going to deal with the Exxon Valdez wreckage in the sea.

The teacher's abductive reasoning was part of the whole teaching strategy as it helped introducing more clarity to the difficulty encountered in class following Abductive Reasoning key steps hypothesizing and hypothesis testing. While testing her hypothesis, the teacher asked a series of questions. The first and second questions were of the same nature, and this gave students a hint about the nature of the following question and the expected answer.

## 2- The Interactive Inquiry Process in EFL Classes

Classroom observations demonstrate up to ten steps during classroom guided-inquiry. From the perspective of the teacher in an inquiry process at the end of which he/she is able to help learners overcome a learning difficulty and correct an incorrect belief and learn a new meaning, the process follows these steps

- (1 **Assumption**→ 2 **Surprise**→ 3 **Doubt**→ 4 **Hypothesis**→ 5 **Hypothesis-Testing**→  
6 **Confirming Hypothesis**→ 7 **Remediation/ Change of Strategy**→ 8 **Fixation of Belief** →  
9 **Acceptance of New Construal** (student becomes aware of the new belief)→  
10 **Agreement on New Belief** (the teacher confirms it. Both parties agree on the new belief.)

It is of importance, here to note that both the learner and teacher experience doubt and formulate hypotheses and try to infer meaning in discussion trying new avenues and providing feedback. The contribution of each one of them in the interaction follows an inquiry process that starts with abduction abduction, supported by induction and confirmed by deduction. In other words, whichever initiates the interaction also triggers the same doubt/belief cycle in the other interlocutor. The latter follows the inquiry until feedback is provided and the new meaning agreed upon by both interlocutors. Most of the time teachers try to understand the

nature of difficulty a learner is facing, to be able to choose the best strategy to help, while the student discovers at some point in the discussion, that his/her understanding of a particular point was incorrect and strives to find the correct answer, by following the teachers' guiding questions. Their endeavour is rewarded when they receive positive feedback which signifies that the meaning they come up with after the discovery process is the one they were looking for. The process of this double doubt/belief cycle can be summarised in the table below

**Table 63 The Inquiry Process in Teacher/Students Interaction**

Teacher's doubt/belief cycle	Students' doubt/belief cycle
1. <b>Assumptions</b> old belief about students' knowledge	
2. <b>Surprising fact</b> doubt old belief	3. <b>Assumption</b> Old belief
4. <b>Hypothesis</b> formulate a new belief	
5. <b>Testing the hypothesis</b> test new belief	6. <b>Doubt old belief</b>
7. <b>Change of strategy</b> act on the new strategy	8. <b>Hypothesis</b> Students formulate temporary hypothesis (generating new belief)
9. <b>Adapting the strategy</b> to learners' feedback and test the efficiency of the strategy. May include numerous actions, such as 'guiding learners with questions, or provide instructions and vocabulary.	10. <b>Testing the hypothesis</b> Expressing a new belief.
11. <b>Positive feedback</b> confirmation of learners' new belief.	12. <b>Fixation of a new belief.</b>
13. <b>Agreement</b> on the shared belief	

*Note.* Adapted from Arrighi, C., & Ferrario, R. (2008). Abductive reasoning, interpretation and collaborative processes. *Foundations of Science*, 13(1), p.12 and Peirce, C. S. (1877). The Fixation of Belief. *Popular Science Monthly*, 12, 1-15.

The table shows all ten steps and their order of occurrence. Some steps of the inquisitive process are shown to be juxtaposed because they most likely occur at the same time. Cognitive actions such as doubting and hypothesizing are hard to observe as they are part of the participants' thinking, but, they can be inferred through actions performed by the participants almost immediately after. The subtle changes in the learners' and teacher's actions can be

accounted for by the thirteen steps showed in the table above. Overall, it can be safely affirmed that both the teacher and the students engage in a combined inquiry process whereby they show doubt about their first impressions, formulate new temporary hypotheses and strive to discover and fix new beliefs about a common topic.

The first difficulty encountered by the students was that of comprehension. Students had to understand the text and answer comprehension questions. The excerpt shown in the table below is taken from the beginning of the lesson

### 2.1. Example 01 from lesson script 07, lines [23-43]

**Table 64 Analysis of excerpt [23-43] from lesson script 07**

<b>Lines</b>	<b>Steps of the doubt/belief cycle</b>
23. T ok... now then, “different kinds of pollution that are [...]? What are they doing to the environment?”	<b>Assumptions</b> learners read the text at home and they got the gist of the text.
24.Ss S2 global warming . [OWA]	<b>Surprising fact</b> The majority of the students answered incorrectly.
25.T hum... different pollution kinds that are... hum?	<b>Hypothesis</b> May be most learners did not understand the question. <b>Testing the hypothesis</b> The teacher reads from the text and leave blanks for students to fill with the right answer.
26.Ss S1 visible and invisible... [OWA]	<b>Confirming the hypothesis</b> The student S1 made another incorrect answer.
27. T visible and invisible what?	<b>Change of strategy (guiding question 1)</b> trying to understand what the student S1 wanted to say.
28. SsS3 types of “pollutions” [OWA]	<b>Learners’ feedback</b> S3 pronounced the word in French )
29. Ss S3 air pollution... [OWA]	
30. T What is pollution doing, here, with air?	<b>(Guiding question 2)</b> trying to understand what the student S3 wanted to say.
31.Ss S3 [SA]	<b>Learners’ feedback</b> passive reaction
32. T is it talking about air pollution?	<b>(Guiding question 3)</b>
33. Ss S2 No, Mrs; ... about global warming. [NP]	<b>Learners’ feedback</b> S2 provides a correct answer.

34. T hum... (reading from the text) ... visible and invisible kinds of pollution that are...?	<b>(Guiding question 4)</b> The teacher refers S2 to the part of the text they should read again.
35. Ss S2 ...contributing to global warming! [FSA]	<b>Learners' response</b> correct answer.
36. T very good!	<b>Positive feedback</b>
37. What is global warming?	(Guiding question 2)
38. Ss S4 'le réchauffement climatique.' [AnsL1]	<b>Learners' response</b> answers in her second language.
39. T Merci beaucoup, je ne le savais pas!	<b>Change of strategy</b> (with ironical tone, kidding with the student for providing the translation in French instead of defining the concept). <b>(use of humour)</b> to point that the translation of the expression 'global warming' is not what is needed but the ability to explain what it is in simple words using the target language.
40. Ss S2 (trying to explain the process ) it is the Earth getting hotter and hotter in the north pole... and the ice is... hum... [FSA]	<b>Learners' response</b> correct answer.
41. T Melting.	<b>(providing vocabulary item)</b>
42. Ss S3 yes! [OWA]	<b>Learners' response</b> S3 agreed.
43. T yes! Good.	<b>Positive feedback</b>

*Note.* Adapted from Appendix 1

In this example, the four students who took part in the discussion with the teacher had experienced a transformation of their perception about the text. They were given the task to read, comprehend then explain the topic of the text following a number of questions. But, when they arrived in class, they failed to answer properly and were surprised to find that their interpretation of the text was rejected by the teacher. A guided debate was engaged to find the correct topic to which each paragraph of the text referred to. Line 23. T- Teacher's Assumptions Learners are asked to read the text at home to get the gist of the text.

- Line 24. Ss **Surprising fact for the teacher** The majority of the students answer incorrectly.
- Line 25. The **Teacher's Hypothesis (01)** May be the question isn't clear enough?

- Testing the **hypothesis 01** The teacher reads from the text and leaves blanks for students to fill with the right answer.
- Line 26. Ss S1 **Confirming the hypothesis** The student S1 made another incorrect answer.
- Line 27. T **Change of strategy (guiding question 1)**
- **Teacher Hypothesis 02** may be students have the right answer, but they cannot express it correctly. (She tries to understand what the student S1 wanted to say.)
- Line 28. S3 (**students' response- or hypothesis testing- testing their new answer**) feedback S3 pronounces the word pollution in French )
- Line 30. **Teacher testing her hypothesis 02** The teacher challenges the student S3 answers by demanding further explanations. (Guiding question 2)
- Line 31. S3 **Learners' feedback** The passive reaction of the student, confirms her second hypothesis (**students mistook the topic of the text.**)
- Line 32. T (**Guiding question 3**) The teacher reiterates the last question to test the other learners' comprehension.
- Line 33. S2 **Learners' feedback** S2 provides a correct answer, but is not sure of it.
- Line 34. T (**Guiding question 4**) The teacher refers S2 to the part of the text that should be examined.
- Line 35. S2 **Learners' response** Correct answer.
- Line 36. T "Very good!" Positive feedback
- Line 37. T "What is global warming?" **Guiding question 5** Eliciting explanation of the phenomenon the text is about.
- Line Line 38. Ss S4 'le réchauffement climatique.' Learners' response Answers in French
- 39. T **Change of strategy (B)** (with ironical tone, kidding with the student for providing the translation in French instead of defining the concept). (use of humour) to point that the translation of the expression 'global warming' is not what is needed, but the ability to explain what it is in simple words using the target language.
- Line 40. S2 (trying to explain the process) "It is the Earth getting hotter and hotter in the north pole... and the ice is... hum..." Learners' response correct answer.
- Line 41. T Instructing **Guiding (C)** (providing vocabulary item)
- Line 42. Ss S3 (**agreement**) Learners' response S3 agreed.
- Line 43. T (**confirmation**) **Positive feedback** Confirming the student hypothesis.

The teacher's doubt was raised by the inability of learners to get the gist of the text. Unable to understand the surprising fact, she did not know how to help learners notice their error and find the right answer. She had to engage in a quick formulated several hypotheses. At first, she thought that her question was not well formulated and reformulated it. Then, she noticed that learners were trying to read random sections from the text to find the answer. Her abductive reasoning was focused on finding a cause for the students' confusion. From a methodological perspective, abduction is but the first step in the inquiry process, it is not sufficient in itself. According to Peirce (1958)

Induction makes it start from a hypothesis which seems to recommend itself, without at the outset having any particular facts in view, though it feels the need of facts to support the theory. Abduction seeks a theory, induction seeks for facts" (Peirce, 1958, para.218).

In other words, the hypothesis which was generated in the first phase of inquiry should be tested in the second phases by inducing conclusions from facts. The puzzling reaction of students led the teacher to investigate the difficulty they were experiencing. To test her second hypothesis which supposes that the students were short of vocabulary items to provide a correct answer, she asked a series of guiding questions, entering the inductive phase of the inquiry.

At the same time, students were also experiencing a doubt-belief process. Based on the teachers' guiding, the learners made their way from the state of confusion to clarity. From line 31, students experienced doubt and started to follow the teacher's reasoning. In line 33, the student S2 tested his own hypothesis with an interrogation, waited for feedback, then restated his answer more confidently in line 35. At that stage, the teacher's hypothesis was partially confirmed. In line 37, she asked learners to explain their answer, the student S4 made a translation to French, instead of providing a definition in English. When the teacher recognised the students' difficulty to express their answer in the target language she helped S2 to define 'global warming' by providing vocabulary and positive feedback. The guided-inquiry was completed when the correct answer and definition were deduced by the learners.

In order to guide the learners in their inquiry, the teacher adapted her way of conducting the lesson to accommodate students' immediate responses. This quick adaptation was the fruit of the teacher's critical thinking skills and the experience teaching EFL students. In the research about critical thinking in education, it is argued that critical thinking is the basis of any inquiry.

In this first example the teacher did not provide the answer right away; instead, she used a retrospective analysis of the classroom situation to make sense of it. First, she tried formulating a plausible hypothesis to explain her observation using abduction. Then, according to students' reactions and answers, the teacher tested her hypothesis, replaced her teaching strategy and guided learners through a set of questions to the desired conclusion. The next examples display a more or less similar structure of the doubt-belief cycles from both perspectives.

## **2.2. Doubt/belief cycles in classroom interactions**

This understanding of critical thinking is based on Peirce's views on meaning making. In fact, Siegel and Carey (1989) conclude that

Peirce's ideas lend clarity to the idea that critical thinking is reflective scepticism.... And his conceptualization of logic as a process of inquiry, that is, as a process of generating and refining knowledge through abduction, deduction, and induction suggests that critical thinking enables us to formulate the hypotheses as well as investigate them (pp. 35-36).

This view that critical thinking is inherent in knowledge generating processes provides teachers with infinite opportunities to teach critical thinking skills. Siegel and Carey (1989) emphasize the fact that the notion of thinking critically should be considered "a matter of reading signs" (p. 7). For teachers, this means that teaching students to pay attention to both teacher's and student's signs in conversation and strive to readjust their thinking patterns accordingly, will create a habit of thinking critically for their students.

### 1.3.Examples of the Interactive Inquiry Process in the EFL Classes from Lesson Scripts

#### a. Extract Analysis 01

**Table 65 Extract [01-18] from Lesson transcript 1**

Transcript lines	Analysis steps
1. T Okay. What happened to the Exxon Valdez do you remember?	Teacher's initial hypothesis the students will be able to answer the question by describing the textbook photograph.
2. T Look at the photo. What happened?	
3. Ss S1 It was wrecked off the coast of Alaska. [FSA]	Students' response they read the caption of the picture.
4. T Yes! It was wrecked on the coast of Alaska.	Doubt the teacher noticed that the students reaction was mechanical
5. T Do you know what does that mean?	(The students read, exactly that was written, but did not get the intended meaning, which was to give his interpretation of the photograph.)  The teacher hypothesised that learners might not understand the meaning of that they read, as they looked unconvinced themselves. She decided to test her theory and elicit explanation from students
6. Ss [SA]	Students response showed their confusion  Student knew their answer wasn't convincing and waited for more instructions.
7. T Look at the picture! Look at the image and tell me what happened and what is it caused by?	Remediation (guiding question 1) the teacher elicits descriptions.
8. Ss S 2 ----- oil spil-l-ed up. [OWA]	Students' response and hypotheis <b>S2 noticed that the questions were related to the task on the same page and thought that the hints</b>

	<p><b>provided in the instruction may help them describe the picture.</b></p> <p><b>S2 tests her hypothesis</b> and boldly utter her answer even though she was uncertain of the right pronunciation.</p>
<p>9. T Indeed, The ship was carrying oil pointing at the black matte displayed in the photo. Look! What happened to the beach?</p>	<p>Feedback <b>Accepting students' response, the teacher chose not to correct the mispronunciation immediately and focus on the correct answer instead in order to carry on the argumentation by asking</b> guiding question 2.</p>
<p>10. Ss S2 Polluted [OWA]</p>	<p>Student uses the resource (textbook) <b>to provide an approximate answer.</b></p>
<p>11. T It was polluted. Just polluted? by what?</p>	<p>Guiding question 3 <b>The teacher tries to get the class to make the link between the oil spill and the state of the damaged beach.</b></p>
<p>12. S1 Oil. [OWA]</p>	<p>Student (testing the hypothesis and trying to get the correct answer)</p> <p><b>She made the link but she did not have the confidence to formulate the complete sentence.</b></p>
<p>13. T What happened to the Exxon Valdeaz first?</p>	<p><b>Guiding question 4 (still testing strategy 2)</b></p> <p>Teacher asks a direct question ( whose the answer is the first part of sentence they were looking for)</p>
<p>14. Ss Students reading from the book “It wrecked in the sea”. [FSA]</p>	<p>Fixation of belief (Students confirm their hypothesis and gain confidence in the use of the sentence whose meaning they had inferred.)</p>
<p>15. T Yes, the ship was destroyed and the oil got out and spilled on the water.</p>	<p>Confirming new belief <b>Teacher provides positive feedback and accepts the students' new understanding and provides the</b></p>

	<b>complete answer. (and she confirmed that her change of strategy was efficient)</b>
16. T Look at the damages of oil spill, What happened to the hotels and restaurants?	Lead-in phase ( <b>The teacher starts a new line of questions, to help learners describe the results of the catastrophe on the environment.</b> )
17. Ss They were ... [Incomplete sentence] [IncS]	The students looked at the textbook. <b>Their first response was to read from the textbook (the activity provided a number of incomplete sentences to complete with a list of suggestions)</b> but they hesitated ( <b>they learned from their first attempt, that perhaps they were asked about their own interpretation.</b> )
18. T they were what?	The teacher prompts them with a direct question.
19. Ss S3 Closed [OWA]	A student provided an answer that was not on the textbook. (Fixation and acting on the new belief)

**b. Extract Analysis 02**

Table 66 Extract [31-48] - Lesson transcript 01

Transcript lines	Analysis steps
31. T ... Now after all the damage, this ship coast, it's the owner of the company decided to do what?	Introducing the context of the next task.
32. T Come on read it in the activity.	
33. Ss " The owner of the company made a press release to apologize for all the damage caused by the oil." [	<b>Students' response</b> mechanical answer from students. (Reading the instruction line.)

<p>34. T So who made this press release, again?</p>	<p><b>Doubt and hypothesis</b> The teacher doubted that students understand the context of the task instruction. She <b>hypothesised</b> that learners may not be familiar with the word ‘owner’ and decided to <b>test her hypothesis</b> by asking who made the press release.</p>
<p>35. Ss The shipping company! [OWA]</p>	<p><b>Student’s response</b> students made an incorrect answer confirming the teacher’s doubt.</p>
<p>36. T Read again. It says here is that the owner of the shipping company made a press release.</p>	<p><b>Teacher’s remediation</b> asks learners to read again and try to self-correct their answer.</p>
<p>37. Ss S1 what does it mean “owner of ‘sheeping’ company”?</p>	<p><b>Student’ response 2</b> S1 clearly states he did not know the meaning of the word ‘owner’, in the same time he expressed his confusion about the words ‘shipping company’.</p> <p>S1 expressed his willingness to learn by asking a direct question about the two words he did not understand.</p>
<p>38. T the owner, the man who built the company or the head of the company.</p>	<p><b>Adapting strategy</b> the teacher provides explanation about the word ‘owner’ which she thought caused confusion but did not comment on the other word that was mispronounced by the student.</p>
<p>39. Ss S1 ‘sheeping’ Company? ‘dameksa’ ?</p>	<p><b>Student S1 tested his own belief</b> about the confusing word by using his first language. S1 thought that ‘shipping’, has something to do with ‘sheep keeping’ thus he thought of a ‘shepherd’ in his first language, but he was confused that nothing in the picture or the text was related to ‘sheep’!</p>
<p>40. Ss [laughter].</p>	<p><b>Peer reaction</b> S1 classmates who got the meaning from the start laughed at his reasoning.</p>

<p>41. T (comment? un berger)? ah you mean the ship? one ship! /fIp/ not the Sheep /fip/. c'est un bateau.</p>	<p><b>Remediating</b> the teacher provided the correct pronunciation and explained the difference in meaning. Thus, helping S1 to fix a new belief.</p>
<p>42. T So he decided to make a press release so what does the objective what is the aim of this press release?</p>	<p><b>Testing the second strategy</b> The teacher went back to make sure the class had a clear understanding of the situation and asked about the nature and purpose of the press release.</p>
<p>43. Ss silence [SA]</p>	<p><b>Feedback</b> Faced with a confused silence the teacher provided vocabulary and asked a guiding question to help her students.</p>
<p>44. T to apologize. What does that mean? He wants to say...</p>	
<p>45. Ss Say sorry.[VP]</p>	<p><b>Acceptance</b> of new belief Learners completed the sentence with the correct verbal phrase.</p>
<p>46. T to say sorry for what?</p>	<p><b>Guiding question 02</b> relying on the assumption that students were familiar with the words 'apology and sorry' the teacher left the last part of the definition for students to complete.</p>
<p>47. Ss S1 Madam! For a for... the catastrophe.</p>	<p><b>Learns' Response</b> S1 made a correct answer this time and his classmates agreed with him.</p>
<p>48. T That's right.</p>	<p><b>Accepting learner's response</b> thus confirming the common understanding of the task context and instruction</p>

c. Extract Analysis 03

Table 67 Extract [08-18] lesson transcript 03

Transcript lines	Analysis steps
8. T When two cars collide, what do we have?	<b>Assumptions</b> The teacher supposed that not all the learners would easily understand the sentence they read on the textbook. “The Exxon Valdez wrecked at the coasts of Alaska.” So she invested the first minutes of the lesson to illustrating the meaning of the word “wreck” using simple questions.
9. Ss S1 A collision? 10. Ss S2 An accident. [OWA]	<b>Surprising fact</b> The student S1 wasn’t entirely sure of the answer. While S2 showed more confidence.
11. T Yes! “An accident” or “collision” (She writes the words on the board.)	<b>Hypothesis /Testing</b> She hypothesised that the meaning of the sentence might not be obvious for learners, So, the she went on with the inference questions.
12. T Now, when you have the same accident in the air this time. When to when two planes have an accident, what do we call it?	.
13. S2 A crash. [OWA] 14. T And what if it happens in waters in the sea?	<b>Confirming the hypothesis</b> Based on learners’ silent response, the teacher understood that they could not comprehend the contextual situation of the activity. Thus, she remediated to that problem before resuming the activity.
15. What do you call an accident between two ships? ... a crash?	<b>Ls Assumption</b> at this point learners to know what the teacher is referring to. The teacher’s inquisitive tone, alerted students that she expected a more detailed answer, thus inviting them to think further.
16. S2 “Un naufrage”. [AnsL1]	<b>Ls Surprising fact</b> The student provided the word for the definition in French but he was

	visibly curious about the word in English.
17. T1 Ok! We just called an accident in the sky a crash, but when it happens in the sea is called a “wreck” or “wreckage”.	<b>Ls Verifying/confirming the hypothesis</b> The word they were looking for was revealed and this fact that confirmed their initial belief that they needed new vocabulary. Learners waited for more instruction or explanation from the teacher.
18. All right then, when an accident happens in the sea or the ocean, it is called wreckage. So for today we're going to deal with the Exxon Valdez wreckage in the sea. I made some research concerning this accident this wreckage.	<b>Ls Confirmation</b> The teacher’s last assertion confirmed that learners’ understanding matched that of the teacher. The teacher’s next questions were centred on the picture. Learners could easily identify the black sticky substance that covered the beach as being “oil” and they formulated the hypothesis by deducing that the oil was on board the ship named “the Exxon Valdez”, and that something must have happened to the ship which led to the spread of the oil on the beach.

a. Extract Analysis 04

**Table 68 Extract [82-97] -Lesson script 04**

Transcript lines	Analysis steps
82- T So how can you react to this cartoon?	<b>Assumption</b> Learners understand the purpose of the cartoon but may not know how to express this in English. And the question may be too general for students to understand.
83- T Do you think what you say and what she's doing are coherent or the same thing?	<b>Acting according to the initial belief</b> The teacher refashioned the question to be clearer for learners.
84- Ss No! it's different. [FSA]	<b>Students’ response</b> confirmed the teacher’s belief.

85- T what do we call it when what you say and what you do is different?	<b>Remediation strategy-Guiding question 01</b> following student response guiding their intellect to the right explanation.
86- Ss[SA]	<b>Negative response</b> from learners
87- T There's a saying a proverb with goes like that "I say what I mean and I mean what I say." But here it is inadequate.	<b>Adapting strategy</b> providing clues by providing the opposite of the needed answer.
88- T So do they do what they say?	<b>Guiding question 02</b> Explaining the previous clue. Pointing at the point she wanted to illustrate.
89- Ss No!	<b>Students building new belief</b> students follow the teacher's reasoning from guiding question one and observe that the cartoon displays two opposite ideas.
90- Ss S2 the opposite.	
91- Ss Yeah they are eating food which is poor in nutrients.	
93- T So what do you think about this cartoon? Is it sad?	<b>Guiding question 03</b> Eliciting description of the genre of the cartoon.
94- Ss NO!	<b>Students' response</b> (correct answer )
95- T No, of course not! It is funny.	<b>Feedback</b> positive feedback
É"	<b>Fixing learners new belief</b> by explaining the concept of 'irony' using the collective analysis the cartoon.
97- T This is what you call "irony". We see something but we need something else.	

b. Extract Analysis 05

**Table 69 Extract [08-18] Lesson Transcript 05**

Transcript lines	Analysis steps
8. T Is a there a difference of pronunciation between the first and the second sentence?	<p><b>Teacher's Assumptions</b></p> <p>Learners have learned about intonation in previous years of English learning.</p> <p>Students will easily recognise the fluctuations of intonation and will be able to say with accuracy the nature and place of each intonation. Even though the teacher is aware that some students may need a reminder.</p>
9. Ss S1 Yes! [OWA]	<p><b>Students response</b> many students struggled to recognise the intonation.</p>
10. Ss No! [OWA]	
11. T No? Do not you feel any difference? [ESP] (The teacher repeats the two sentences.)	<p><b>The surprising fact</b> in this case the, is that the majority of students did not recognise the intonations in the examples at all.</p> <p>The teacher <b>hypothesized</b> that may be the class did not hear the examples well the first time, and that she needed to repeat them.</p> <p><b>Testing he hypothesis</b> she asked learners to pay attention to the way she pronounces the sentences.</p>
12. Ss Yes. [OWA](All students agree that there is a difference in pronunciation.)	<p><b>Students doubt</b> was raised by the teacher's question about the intonation.</p> <p><b>Student's response</b> more students acknowledged the difference in pronunciation.</p>
13. T What do we call this in phonetics?	<p><b>Guiding question 01</b> eliciting the concept in phonetics that talks about the observed fluctuation in pronunciation.</p>
14. Ss [SA]	negative <b>Students' response</b>

15. T Where do you hear this difference more?	<b>Change of strategy</b> student did not seem to remember anything about ‘intonation’ thus she started. The teacher needed to make them infer the rule on their own with a second <b>guiding question</b> .
16. Ss At the end... [IP](independent phrase)	Student response students tested their own assumption about pronunciation that comes at the end of sentences and expressed that belief in one word ‘intonation’
17. Ss; S2 Intonation. [OWA]	
18. T Yes, we are speaking of sentence intonation. [ESP ] [PR]	Positive feedback (acceptance) the teacher accepts the students answer fixing their new belief.

c. Extract Analysis 06

**Table 70 Extract [23-43] Lesson Transcript 07**

Transcript lines	Analysis steps
23. T ok... now then, “different kinds of pollution that are [...]? What are they doing to the environment?”	<b>Assumptions</b> learners read the text at home, and they got the gist of the text.
24.Ss “Pollution”// S2 “global warming” . [OWA]	<b>Surprising fact</b> while The majority of the students answered incorrectly, but they appeared uncertain.  Their answers showed that they may have been confused about the topic of the text with something they have studied before.
25.T hum... different pollution kinds that are... hum?	<b>Hypothesis 1</b> May be I should reformulate the question first, then check if they did not rely on memorisation instead of reading the text?  <b>Testing the hypothesis</b> The teacher reads from the text and leaves blanks for students to fill with the right answer.

26. Ss S1 visible and invisible... [OWA]	<b>Learners' feedback</b> The student S1 extracted an incomplete answer from the text.
27. T visible and invisible what?	<b>Confirming the hypothesis</b> Students could not confidently describe the topic of the text.  <b>Change of strategy (guiding question 1)</b> verifying if student S1 understood what he read or just copying from the text, thus she prompts him to answer in a complete sentence.
28. SsS3 types of "pollutions" [OWA]	<b>Learners' feedback</b> S3 pronounced the word "pollution", as they would in French and confirmed the teachers' hypothesis
29. Ss S3 "air pollution..." [OWA]	
30. T What is pollution doing, here, with air?	<b>(Guiding question 2)</b> There was no mention of "air pollution" in the text, so the teacher discovered that the student answered from memory of previous knowledge and not from text comprehension. Thus she point out this fact to her, and inviting her to try again.
31.Ss S3 [SA]	<b>Learners' feedback</b> The student's passive reaction indicate her difficulty to understand the text, and by the same providing the teacher with feedback and reveals potential comprehension difficulties.
32. T "Is it talking about air pollution?"	<b>(Guiding question 3)</b> Rhetorical question Inviting learners rethink their previous assumption that the text describes the four types of pollution they remember, which prevents them from paying attention to the text.
33. Ss S2 No, Mrs; ... about global warming! [NP]	<b>Learners' feedback</b> Learners finally return to the text with fresh eyes and skimmed for the topic. S2 provides a correct answer.  <b>(Fixation of new belief</b> the text was not about

	types of pollution, but about the causes of global warming.)
34. T hum... (reading from the text) ... visible and invisible kinds of pollution that are...?	<b>(Guiding question 4)</b> The teacher refers S2 to the part of the text they should read again.
35. Ss S2 ...contributing to global warming! [FSA]	<b>Learners' response</b> correct answer.
36. T very good!	<b>Positive feedback</b> (teacher accepts the answer and confirms the new belief)
37. What is global warming?	<b>(Lead-in learning phase Guiding question 1)</b> Teacher starts a new discussion about the meaning of the concept of "Global Warming". <b>(Assumption 2)</b> Learners are familiar with the concept and they could cite the text for key words.
38. Ss S4 'le réchauffement climatique.' [AnsL1]	<b>Learners' response</b> S4 answers in her second language. <b>Surprising fact</b> Learners are familiar with the concept, but they are not able to describe it in English.
39. T Merci beaucoup, je ne le savais pas!	<b>Humorous Feedback</b> Amused, the teacher answered ironically to point that she did not ask for the translation of the expression 'global warming', but she asked for a definition in English. <b>Hypothesis/ testing he hypothesis</b> Maybe, if allowed more reflection time, students will produce an acceptable definition in English.
40. Ss S2 (trying to explain the process ) it is the Earth getting hotter and hotter in the north pole... and the ice is... hum...[FSA]	<b>Learners' response</b> correct answer but it lacks precision. <b>Confirming teacher's hypothesis.</b> Students need help formulating the ideas they already

	know in English.
41. T Melting.	<b>(providing vocabulary item)</b>
42. Ss S3 yes! [OWA]	<b>Learners' response</b> S3 agreed.
43. T yes! Good.	<b>Positive feedback</b>

**d. Extract Analysis 07**

Table 71 Extract [63-82] - Lesson Transcript 07

Transcript lines	Analysis steps
63. T So all these gases are destroying ...? (what?)	<b>Lead-in (to another concept)</b> <b>Guiding question 1</b> to help learners infer and express the role of global warming gases on the Ozone layer.
64. Ss The Ozone Layer. [OWA]	<b>Learners response</b> correct answer
65. T Ok! Making in it...?	<b>Assumptions</b> Learners had a good start they understand the text they know the answer they may say all the answers in English.
66. SsS1 ... trous? [OWA]	<b>Surprising fact</b> S1 could not find the word in English but he shows that he knows the concept. <b>Hypothesis</b> May be the student only need time to remember, a simple word they should have learned before.
67.T des trous... in English "trous"...? [AnsL1] (French)	<b>Testing hypothesis</b> Teacher insist that s1 says the word in English. <b>Guiding question 01</b> elicit the effort of remembering.
68. Ss S2 huh...  h  ? [GA]	<b>Student hypothesis</b> The teacher insists that the word in English is easy, so its probably something I heard before, so <i>I may as well try!</i> I

	<p>think , perhaps its starts with /h/?</p> <p><b>Students response</b> S2 remembers that the word starts with the letter H, she uttered the sound /h/ mimicking to her comrades for help.</p>
<p>69.Ss S1 No !! Mrs; /he/.../ho/.... [GA] (trying to find the word)</p>	<p><b>Peers response</b> Inspired by the S2, S1 remembers the second letter of the word.</p> <p>He had the same hypothesis as S1 the word starts with and H and he heard it before.</p>
<p>70.Ss S2  hɔl  (mispronunciation) [OWA]</p>	<p><b>S2 tests the hypothesis</b> by choosing a combination of sounds he thinks that it corresponds to the word they are looking for and proposing it to the class (knowing that it may or may not be true.)</p>
<p>71. T yes, holes  h . Making holes in the Ozone Layers. (writing on the board)</p>	<p><b>Teacher feedback</b> confirms S2's answer by adding an indication that the pronunciation was wrong even though the word was right.</p>
<p>72. T so do we write it like this? (hols)</p>	<p><b>Consolidation</b> The teacher wanted further confirmation that the learners accept the new construal and uses the moment to provide additional information about the word to make the explanation complete. Thus she asks about the word's right spelling.</p>
<p>73.Ss S1 no Mrs, with "e" and ... "W"</p>	<p><b>Students' response</b> S1 &amp; S2 provided the correct pronunciation, confirming the teacher's hypothesis that most students have knowledge of the word in English and that they needed more time and patience to find it, themselves. However, their incomplete answer raised teachers' doubt about their knowledge of its spelling.</p> <p><b>Doubt</b> Would they recognise the written form of the word?</p> <p><b>Hypothesis</b> They would perhaps confuse the</p>

	homophones (whole and hole)?
74.T or like this (whole) ? This and this (pointing to both written words) are pronounced [h <sup>oʊ</sup> lɪz]. And they are...? Homo...?	<p><b>Testing hypothesis</b> The teacher challenges learners to spell the word correctly by reminding them of a rule in vocabulary. Students answer will tell the teacher if they truly understand both words.</p> <p><b>Hypothesis 3</b> Learners know the meaning of both words, and may understand they were homophones.</p> <p><b>Testing hypothesis</b> ( guiding question 3)</p>
75. Ss S3 Homonyms. [OWA]	Students response eventually they found the correct answer
76.Ss S1 – S3 Homophones. [OWA]	
77.T homophones, yes. [ESR]	Teachers’ feedback T accepts learners’ response; But her hypothesis needs confirmation.
78.T What are homophones?	She tests her third hypothesis by asking directly the definition of the linguistic concept.
79.Ss We hear it the same, but in writing different. [FSA]	Learners provide the correct definition providing confirmation for the teacher’ hypothesis.
80.Yes, so what is the difference? Are we talking about ‘holes’ this one (pointing at the written word on the board or this one ‘wholes’.	<p>The graphic representation of the words on the board was crucial for the clarity of the interaction. Pointing at either of written words on the board guided learners’ answers and helped them retain spelling information better.</p> <p>Thus the words ‘hole’ and ‘wholes’ are learned as symbols through icons and indexes. The object of the word ‘hole’ and it’s sign were known to the learners, but the teacher helped them make the link between the two, and generate the interpretant (“Pollution makes a <b>hole</b> in the Ozone layer and causes global warming.”)</p>

	Learners were guided to infer the rule that says that the words ‘whole’ and ‘hole’ are homophones, and the word they were looking for in the context relating to the Ozone Layer is the word ...‘hole’.)
81.Ss Mrs, ‘hole” without ‘W’. [FSA]	<b>Fixation of the concept</b> Learners choose the word that belongs to the context.
82.T (yes!) with a ‘W’ which means in... entire; the whole class.	<b>Accepting and agreeing on the new belief</b> The teacher accepts learners’ proposition and adds more instruction (information about the other homophone and to consolidate the information.)

e. Extract Analysis 08

Table 72 Extract [110-141]- Lesson Transcript 07

Transcript lines	Analysis steps
110. Ss 2 (write on the board) “different <del>S</del> ” kinds of pollution.’ (spelling error)	<b>Students old belief</b> the word different takes an ‘s’ at the end in a plural sentence.  <b>Surprising fact for the teacher</b> student misspelled the word (different) on the board and no one had noticed, despite being a common English word and one of the first words that students learn.
111. T yeah! Different! What about different? There is something missing with the word different? (Meaning the words the student has just written on the board.)	<b>Hypothesis 01</b> either the student S2 simply failed to notice her mistake.  Or  <b>Hypothesis 02</b> The student and her classmates write ‘different’ with ‘s’ because of language transference. Perhaps they confused the language rule in French, considering the word for “different” in French is similar in English?

	<p><b>Testing the hypothesis</b> the teacher drew her learners' attention to what is written on the board, but she did not specify the problem, and she asked an open question about the word 'different' in the sentence.</p>
<p>112. Ss S3 the 'e' diff 'e' rent ( French pronunciation) [AnsL1]</p>	<p><b>Student response</b> S3 could not recognise the problem. But was intrigued.</p> <p>The teacher's remark raised doubt about the word's correct form.</p>
<p>113. T hum... yes; but , do you put an 's' at the end of different?</p>	<p><b>Confirming hypothesis</b> The teacher confirmed the second hypothesis and decided to investigate.</p> <p><b>Change of strategy</b> Asking a closed question to test learners' belief.</p>
<p>114. Ss S3 No! [OWA]</p>	<p><b>Student Doubt</b> S3 doubts that the word different has ever taken an 's' before.</p> <p><b>Student hypothesis</b> The word spelling might be wrong.</p> <p><b>S3 tests his hypothesis</b> and changed his first observation.</p>
<p>115. T why not?</p>	<p><b>Guiding question</b> (eliciting student's attention &amp; inference), the teacher asks for the reason of this sudden change of mind, eliciting an explanation from the learner.</p>
<p>116. Ss S1 different 's' we're talking about kinds. 'Ça indique qu'il ya plusieurs.' On a rajouter le « s » Mrs. [FSA] [AndL1]</p>	<p><b>Students' response</b> S3 augmented by providing the rule in French that compels him to think that 'different' should have an 's' at the end to indicate the plurality.</p>
<p>117. T We are talking about the correct answer. This is not the correct answer.</p>	<p><b>Feedback</b> the teacher challenges the student belief by a negative feedback.</p>
<p>118. T Why can't we put an 's' here? (she</p>	<p>And asks a <b>guiding question</b> to clarify the</p>

points at the written word on the board)	nature of the problem. (Why the word 'different' shouldn't take an 's' even with plural names?) Eliciting a grammar rule.
119. Ss [SA]	
120. T if I can chose, can't I take the 's' here ( <i>pointing at the end of the written word "kinds"</i> ) and put it here? ( <i>pointing at the end of the written word "different"</i> )	
121. Ss S2- S3 No. [OWA]	<b>Students' response</b> S2 and S3 know they should not add 's' to the word 'different' but they cannot say why!
122. T Why not?	<b>Guiding question 02</b> eliciting explanation. Inviting learners to think and argument.
123. Ss S1 'sinon ça n'aura pas le même sense'. [AnsL1]	<b>S1 tests</b> his first hypothesis 's' is added each time a plural is involved.
124. T huh ! No, this is not the correct answer.	<b>Feedback</b> teacher elicits self-correction from S1.
125. Ss S4 Mrs... c'est 'different' [AnsL1]	Another student joined in the discussion and had a different opinion.
126. T (amused) et? And ? et alors? [AnsL1]	<b>Guiding question 03 and 04</b> the teacher turns the conversation to grammar. Indicating that there was a grammatical rule to solve the present problem.
127. T Ok! let me help you. What part of speech is it?(explanation about the form of linguistic sign)	
128.Ss [SA]	<b>Students' response</b> Students hesitated to answer the question, silence showed their incomprehension of the phrase 'part of speech.'
129.T Is it a noun, a verbs, an adjective?(providing choices of linguistic forms to choose from)	<b>Guiding questions 06, 07</b> The teacher questions clarifies the question by explaining the parts of a sentence. She asks a multiple choice questions.
130.Ss no... (thinking) [OWA]	

131.T adverb?, proposition? (more choices to choose from)	
132.Ss S6 Preposition. [OWA]	
133.Ss S2 Adjective. [OWA]	
134.T Très bien. [PR] [AnsL1] (French)	
135.Ss noun. [OWA]	
136.T Noun? Adjective? [ESR]	
137.Ss S4 No, adjective ! [OWA]	<b>Students response</b> After a few attempts The S4 make a correct answer.
138.T (applauding) (followed by other students applauding too) yes, you can applaud her! Adjective! It is and adjective. In English, what's different from the French language? [PR]	<b>Positive feedback</b> confirms the answer and asked another Guiding question to guide the learners to the grammar point.
139. T in the French language you have to change the ends of adjectives and verbs according to the noun. (providing and explaining a linguistic rule) Et "cela s'appelle? _____ (referring to the concept explained before.)	<b>Remediating</b> providing explanation using a rule from students' first foreign language. Providing the rule they were referring to in French to contrast it with the rule in English.
140. Ss _____ (students repeat in the same time with the teacher.) s'accorde en genre et en nombre" this is the difficulty of the French language. Concerning English_____ [AnsL2] (French)	<b>Students' response</b> All the class knows the rule in the French language (Contrasting the old belief with the one they had inferred.)
141. Ss S1 _____"the adjectives do not change. [FSA]	<b>Fixation of belief</b> S1 formulates the rule and accept the new construal.

f. Extract Analysis 09

Table 73 Extract [149-167] - Lesson Transcript 07

Transcript lines	Analysis steps
149. T Have you checked the meaning of “smog”?	<b>Assumption</b> Teacher supposed that learners had looked up the word ‘smog’ in the dictionary therefore they could be able to provide the correct definition.
150. Ss S2 Yes, Mrs. [OWA]	
151. Ss S1 Smog is a dark.. huh ... a dark smoke... very dark smoke. [FSA]	<b>Students belief</b> S1 tried to explain what the word ‘smog’ meant to him. The expressed belief of S1 became  <b>A surprising fact</b> , that challenged the teacher’s assumption
152. T a-huh. (as a yes)	
153. Ss S3 Yes Mrs, ‘une fume très noir.’[AnsL1]	<b>Hypothesis</b> students may have heard the word ‘smog before but they do not know what it means.
154. T Smog is the association of two words...	<b>Testing the hypothesis</b> asking about the origin of the word.
155. Ss S1 What? [Ask]	<b>Students doubt</b> their initial belief.
156. T smoke and...	<b>The teacher maintains</b> her strategy and provides part of the answer.
157. Ss S1 and Gas! [OWA]	Student S1 hypothesized that since the topic of the text was about pollution, the word ‘smog’ should have relation to polluting gases.
158. Ss laugh	<b>Teacher and peers’ feedback</b> was negative and indicated that S1 had guessed wrong.
159. T No...	
160. Ss S2 ‘tu y était presque’ [AnsL1] (Ss/Ss interaction.)	
161. T Look at this! (Pointing at the window.) Can you see the mountain?	<b>Remediation (Change of strategy)</b> the teacher uses indexical and iconic signs to help learners experience the object of ‘fog’ the other part of the word ‘smog’ before they hear the word spoken. (she points at the landscape through

	<p>the window which offered the view of a mountain partially hidden behind thick fog.)</p> <p><b>Guiding question</b> encouraging students to infer the word for the meteorological phenomenon they were observing.</p>
162. Ss No [OWA]	<p><b>Students' response feeling doubt</b></p> <p><b>And making the hypothesis</b> that somehow the word 'smog' is related to what they see through the window, which is a familiar concept to them.</p>
163. Why not?	<p><b>Guiding question</b> leading learners to express what they see in a comprehensive sentence.</p>
164. Ss 'aghu'! (word in Kabyle) .[AnsL1] S2- S4 le brouillard. (word in French).[AnsL2] [OWA]	<p><b>Students response</b> some answered in French the rest in Tamazight.</p>
165. T yes! It's the "Fog" c'est le brouillard en français. [AnsL2] [ESR]	<p><b>Adapting strategy</b> the teacher provides the English word for the word in French.</p>
166. Ss S1 so it's a fusion between smoke and fog.[FSA]	<p><b>Fixation of belief</b> S1 readjusted his definition of the word 'smog' and made a correct answer this time and a new belief about the word is constructed.</p>
167. T yes, it's a fusion. That's it. [ESR]	<p><b>Agreement</b> The teacher confirms the new expressed belief with a positive feedback.</p>

**g. Extract Analysis 10**

Table 74 Extract [07-26] Lesson Transcript 10

Transcript lines	Analysis steps
7. T Look at the picture and discuss the following questions.	Reading the activity instruction
8. T What is it about? What is the picture about?	<b>Assumptions</b> The teacher thinks that learners are able to describe what they see in a picture using the target language and answer questions about it.
9. Ss Mrs! [GA] (Raising hands, asking for permission to answer.)	<b>Surprising fact 1</b> Students confidently raised their hands asking for permission to speak a little too quickly.
10. Ss S1 Racism. [OWA]	<b>Surprising fact 2</b> When, granted the permission to answer, student S1 did not answer the question directly, instead she talked about the concept of racism.
11. T Racism? [ESR]	<b>Hypothesis</b> The teacher realised that the student answered automatically based on the theme of the unit.  - The teacher formulated the hypothesis that, may be the other student were uncertain about her answer and may not be able to provide a description when they are asked to.
12. Ss No! [OWA]	<b>Testing of the hypothesis</b>  - The teacher kept assessing whether the students were certain of their answer. She kept on asking more questions.  - She emphasised the first question to indicate that student should only answer the question they are asked.
13. T No? [ESR]	
14. T What do you see in the picture?	
15. Ss S1 Mrs! Slaves! [OWA]	<b>Confirming the hypothesis</b>

	Student S1 answered the question partially while the other students remained silent! The teacher recognised that her learners have difficulty to describe what they observe.
16. T Slaves? [ESR] How do you know they are slaves?	<b>Change of strategy</b> (guiding question 1) Eliciting details from students training their ‘describing competence.’ The teacher shows learners the kind of questions they should ask when they describe a picture.
17. Ss [SA]	<b>Learners’ feedback</b> Passive reaction
19. T their hands are tied behind their backs. Look!	
20. T So, where are they?	<b>Adapting her strategy (guiding question 2)</b> by providing an easier guiding question.
21. Ss In the boat. [OWA]	<b>Learners’ feedback</b> one word answer (direct answer)
22. T Can you give me a synonym of ‘Boat?’	<b>Guiding question 3</b>
23. Ss S3 Ship! [OWA]	<b>Learners’ feedback</b>
24. T “Ship” yes, [ESR] or we can say “The picture represents a ...”?	<b>Positive reinforcement</b> - confirming their answers. And <b>Guiding question 4</b>
25. Ss [SA]	<b>Learners’ feedback</b>
26. T We can say... “ a slave ship”, right?	<b>Guiding question 5</b>
27. Ss Yes! [OWA]	<b>Learners’ response</b> Learners accept the common construal. (they learned how to describe what they see, and finally learned the concept of a ‘slave ship.’)

## Summary

In the previous section, Teacher/student interactions have been analysed to decipher the purpose and methods of teachers' enquiry and how it is applied simultaneously for problem solving and teaching. The inference processes used by both students and teachers are explained. The chapter closes on providing an interactive model for the analysis of teacher- guided enquiry in EFL classes.

It is argued that T/S interactions take the form of scientific enquiry processes whereby EFL concepts are presented and meanings are negotiated in interaction when the entire class acts as a scientific-community-like context. The inference processes applied in classroom interactions are analysed using the abductive reasoning model of Arrighi and Ferrario which revealed that the initial step in the inference process is the feeling of surprise which leads to doubt, which in turn motivates the formulation of a new hypothesis about the subject of the discussion. The latter procedures constitute the use of the mode of abduction in research before the use of induction and deduction.

The last section established that abduction, the only mode of inference that generates new possibilities, is an integral part of scientific enquiry and should be recognised and facilitated in the inductive EFL class. Also, the interaction patterns within the enquiry process which have been discussed had shown that T/S interaction sequences are more flexible than the traditional IRF interactions structure and the reason is that T/S interaction doesn't go in one way from the teacher to students, but can also be initiated by learners, and teachers have to infer their students' meanings to monitor their progress and their learning difficulties. In these instances, the IRF interaction pattern is reversed to accommodate the progression of the enquiry. Indeed most of the interaction patterns are visible during specific lesson phases where it is more likely to deal with comprehension and inference problems. For instance, the reversed IRF sequences are observed during "answer-checking" and "instruction making" learning phases are more flexible and have more room for trial and error, thus observed more often in classroom enquiry. Students' feedback becomes the starting point of the interaction which roughly follows sF-In-sR-In-tF. Students' feedback is followed by a question or a task instruction, which intends students' response followed by the teachers' feedback. This sequence reoccurs several times in a single conversation. Some of the strategies used by teachers to teach scientific enquiry in practice rely heavily on T/S interaction. Next discussion section will analyse the semiotic

scenarios of learning new words, and explain the how semiosis takes place within T/S interaction.

To conclude we can say that the previous section demonstrated how the process of guided enquiry depends entirely on scientific discovery in which doubt is of paramount importance. In addition to the initial doubt or uncertainty about the meaning of spoken utterances, the interlocutor formulates hypotheses or temporary explanations of what the speaker means and tests their hypotheses by asking questions to which the interlocutor provides feedback to direct the listener toward a correct understanding of new words in the target language. To do so, the teacher employs different signs that may direct learners' attention to familiar ground, i.e. to the meanings they have already acquired in their multilingual repertoire.

This mediation process is similar to the semiotic concept of "common ground" which refers to the Peircean term of "the ground" or the aspect of the sign that signifies. In this case, as learners try to make sense of different signs, the meaning of a new word gradually becomes clearer with every successful interpretation of intermediary signs or interpretants.

Interpretants are also what make the goal of the conversation understandable for interlocutors. In the EFL class, T/S interactions have two mediating roles. In addition to learning new concepts in the four language skills and acquiring competencies, learners learn in practice how to use inference to uncover previously unknown meanings from materials in the target language. After analysing the types of inference that take place in T/S interaction and how the learning process is guided through learning difficulties and communicational obstacles. The subsequent question to be analysed in the next discussion section is how semiosis (the meaning-making/interpretation process) unfolds in interpersonal interactions and how meaning is generated in Teacher-guided interactional enquiry.

## **Chapter 5 of the Discussion**

# **A Semiotic analysis of Vocabulary Learning in EFL Classes**

## **Introduction**

The purpose of this part of the discussion is to describe through the lens of the triadic semiotic theory of Peirce how signs develop in interaction and how learners infer the meaning of the signs that teachers provide in class and how can learners learn new words in the end of a learning sequence. It is necessary to explore in detail the actions of signs in conversation as a dialogical tool for discovery learning in EFL classes.

Two analytical models, which are inspired from Peirce's Triadic Semiotics, are combined and put into practice for the analysis of meaning making processes during classroom T/S interaction. Excerpts from lesson scripts are analysed qualitatively by applying these models to explore, from two complementary perspectives how new meanings are generated during Teacher-Guided Enquiry in EFL classes.

The first model is Pietarinen's triadic model of interpersonal communication, which is based on the triadic sign structure. Pietarinen (2006) shows how the utterer makes signs (or interpretants) which have a communicational potential, (i.e. which conveys meaning that could be interpreted by the receiver or the interpreter. Here, the interlocutor is labelled 'interpreter' for his/her ability to interpret messages and produce signs or "interpretants" to represent the meaning they have inferred from a conversation or an enquiry process. These terms the utterer's intentional sign, the communicational interpretant and the effectual interpretant, will be referred to and used to explain the action of signs within T/S interaction;

The second model used in this section is Nôth's learning scenarios for learning new words; (i.e. foreign language signs). This model draws from the constituents of a triadic sign, and their structure within the mode of inference being used in enquiry. In other words, Nôth asserts that what is meant by learning a word or knowing its meaning is a matter of what part of the sign is present to the learners mind and which one is yet to be acquired. For instance, a learner may be aware of the idea of a flying means of transportation, and even has a word for it in his first language repertoire. However, what the learner lacks is the sign that represents that 'object' in the target language. So, when the word "plane" is related to the mental idea of flying in the mind of the learners, and used in meaningful sentences (forming a logical interpretant in their mind); this is what it is to learn that word. Nôth proposed six different scenarios of learning all three elements of any vocabulary item. Five of which are applied to the corpus of this study; the results of this analysis are illustrated in this section.

Using these two theoretical perspectives we illustrate the process of generating new meaning through T/S interactions. For the sake of clarity, this is an outline of the structure of this discussion section;

- Triadic Nature of Education Adaptation of Housseye's triangle of educational principles;
- Learning as a Triadic and Dynamic Process Discussion of the central elements and relations of the teaching/learning process;
- Semiosis of Enquiry Triangulation as central to the learning process critical inference in enquiry;
- The Three Types of Signs in Interaction Adaptation of Pietarinen's interactional model to explain the inference process in teacher-guided enquiry;
- Scaffolding through Learning Scenarios Application of Nôth's learning scenarios in the corpus;
- Combined Interactional Model of Meaning Generation through T/S Interaction.
- .

The relations between the three constituents of EFL language learning the teacher, the student, and knowledge (Which refers to learning goals and language competencies that learners are expected to master at the end of each level of secondary education). In order to know how new words are learned, parallels will be drawn between the triad of learning and the triad of meaning i.e. the Peircean concept of the triadic sign and the interrelated relations between the components of the sign in the view of conceptualizing the process of sign interpretation in teacher/ student interaction in an EFL enquiry-based learning procedure.

### **The Semiosis of learning**

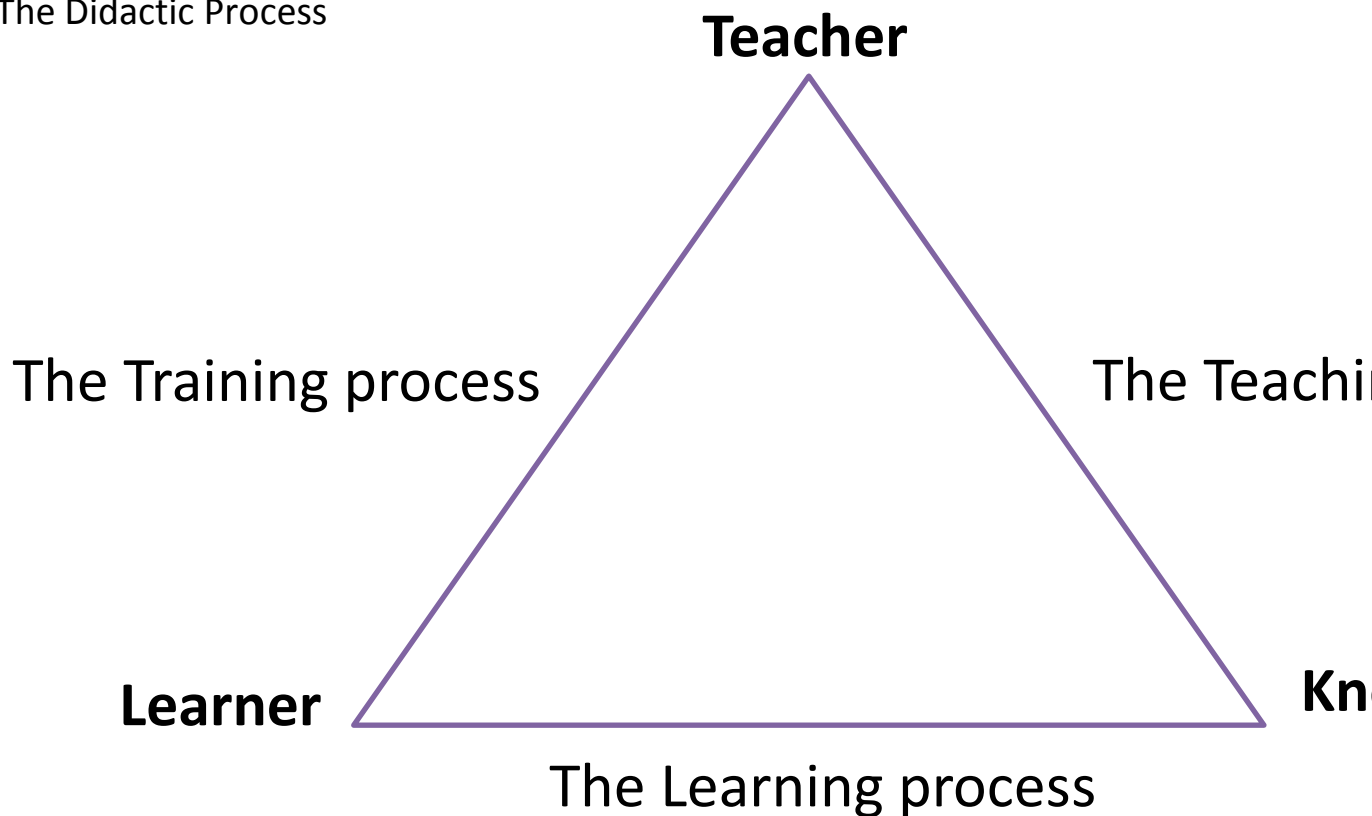
EFL learning is often defined as the interaction of three elements of the educational process, namely knowledge or competence (what to learn), (who learns) the learner, and (who teaches) the teacher

Houssaye (1988) suggests that when the learner is involved in working with knowledge (content) the teacher is out of the equation and when the teacher interacts with the learner knowledge is left out of this interaction. What we observed in class is somewhat different. Data shows that when learners are given time to work on a task individually or in groups, the teacher is often solicited for help. Thus, learners' autonomy does not mean the absence of the teacher. It simply means a different role for the teacher. Inquiry-based learning provides the learners with the ability to engage in a discovery process where they use their cognitive (deductive but also abductive and

inductive) faculties to make hypotheses and solve problems

# Houssaye's Educational Triangle

The Didactic Process



**Figure 65 Houssay's Educational Triangle.**

- **Knowledge** can be the training content, subject matter or curriculum to be taught.
- **The teacher** is the one who makes it exist, "transmits" and makes it learn knowledge.
- As for **the learner**, he learns through an educational situation set up by the teacher.
- **The Teaching process** is the relationship between the teacher and knowledge which is a didactic relationship that enables the teacher to teach.
- **The Didactic process** is the relationship between the teacher and the learner which is a pedagogical relationship that allows the teacher to *guide and form* an apprentice to become an autonomous learner.

**The Learning process** In the relationship between the learner and knowledge which a discovery/learning relationship that allows the learner to seek and *appropriate* knowledge.

The first thing that can be noticed in Houssaye's Pedagogical Triangle is its resemblance to Peirce's Semiotic triad. Parallels can be drawn between the components of EFL education and the components of a meaningful sign in order to analyse how meaning is generated within EFL learning. Similarly to the sign or representamen, The teacher can be considered an "interface" between 'knowledge' or 'competence' and the student, while the other two constituents become the object and the interpretant respectively. An inclusive diagram of meaning language learning has to include all six elements the teacher/sign- the student/interpretant- and "the know-how" as the object of interpretation. The term 'know-how' is used instead of 'knowledge' to include all the competencies that EFL students need to acquire. During T/S interactions, students gain access to knowledge through interaction with the teacher (these questions, explanations, and activities). In the same way that the sign is conditioned by its object, the teacher (as a sign) is determined by the object it represents (i.e. the knowledge of and about the target language). This "determination" relationship varies depending on the content, and is manifested in the learning process.)

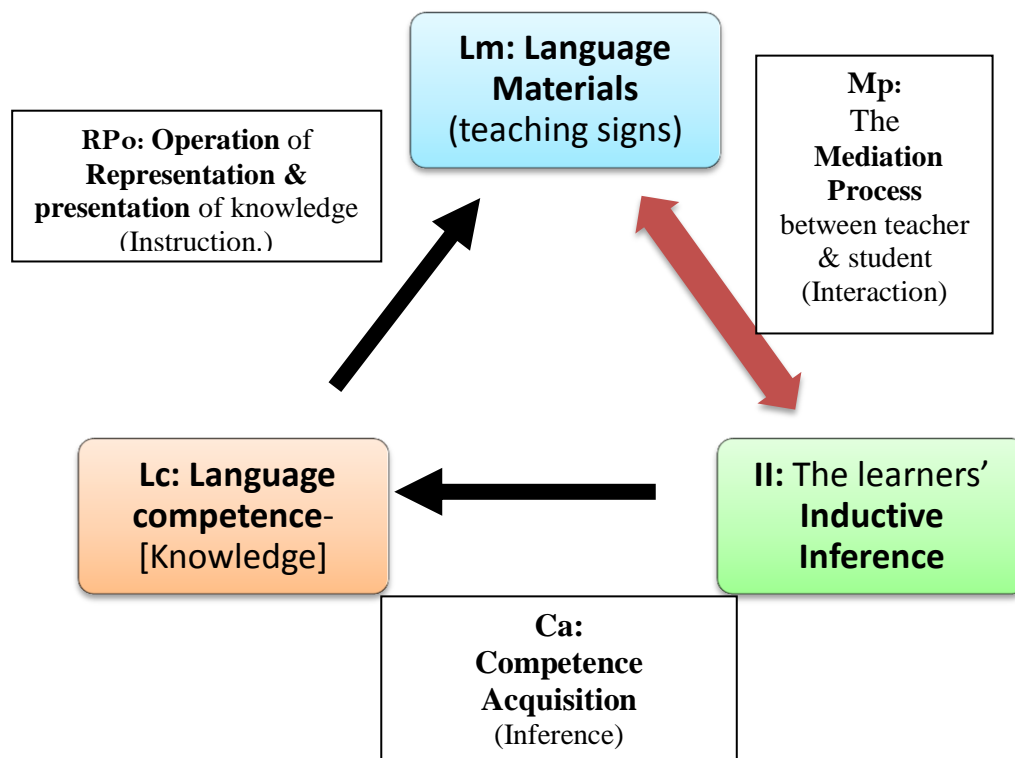
Through a mediation effort, teachers represent something other than themselves to help students discover and recognize signs in the target language through which they acquire language skills and pragmatic competencies. In order for students to learn new signs and apply them in new situations they have to become accustomed to making a connection between the signs and what they refer to in the context of a conversation (the object of the sign) through a logical interpretation or rule i.e. the "Interpretant" which in turn becomes internalized student's "semiosphere " or mental cognition, thus it can be considered as "learned"

The interpretant (the meaning constructed by the student) is concretized in different ways (a silence, a question, a good answer, a false or incomplete answer... etc) and becomes a sign to be interpreted by the teacher. This allows the continuity of communication between the teacher and the student in the interactive dimension. It is up to the teacher to check if the meaning constructed by the student adequately matches the initial object of the sign, the intended meaning, through a process of meaning negotiation or guided inquiry (see the previous chapter)

### The Relation of the Three Elements of the Educational Operation According to Inductive EFL Teaching

This is how the relation between teacher (teaching), student (learning) and teaching content (knowledge) is perceived in the Algerian secondary education EFL Syllabus

The teacher present language material and organised the learning tasks and lesson procedures, while the learners engage in peer interaction and teacher/student interaction in order to practice language skills and acquire language competencies.



**Figure 66 The Educational Operation in Inductive EFL Teaching**

This conceptualisation of the educational process, the mediation process and the acquisition process appear to be separate entities as if the teacher's role of presenting language materials within classroom interaction is a separate endeavour from the learner's inference and interaction.

## A Semiotic analysis of Vocabulary Learning in EFL Classes

These two positions are treated separately from each other as if neither process depends on the other. This dual conceptualization of teaching/ learning suggests that learners' inductive inference is always flawless and that it is enough to guarantee competence acquisition and thus language learning without any obstacles or learning problems. However, as explained in the literature review, the perspective of the Edusemiotics approach to learning offers the view that teaching and learning are intrinsically interdependent and cannot be separated in their characteristics of sign interpretation and meaning generation. In semiotic terms, the process of learning/teaching is a process of sign interpretation and development of interpretant. Learning is the process of discovering the meanings of the signs in use. Therefore, the educational process and the semiosis process (The action of signs) merge together and allow for significance to emerge through familiar and unfamiliar signs in view of reaching common ground and communicating the goal of EFL instruction. T/S interaction allows for a cycle of logical reasoning that results in meaning-making through observation, interpretation, and ultimately verification of signs produced by interlocutors in interaction which provides motivation for inquiry to take place and result in learning new signs.

While the pedagogy of Houssaye is essentially dyadic i.e. that it is based on the privileged relationship of only two entities of the three elements of the triangle. As long as attention is focused on this relationship, the third element remains "unaccounted for" or "inactive". These relations stay at the level of secondness as there is no triadic interaction between the three entities, but only a dyadic relationship. In Peirce's triadic model of sign structure semiosis, the action of signs is only possible in the interaction of three elements of the sign. In the same vein, meaning-making is only possible in the triadic relation of teacher, knowledge, and learner in their functions of representing, determination, and interpreting respectively. The simultaneous interaction of the three entities in the diagram (competence, teaching, and learning) is, therefore, quite possible. To make a possible analogy between the semiotic triangle and the pedagogical triangle, the three elements of instruction should bear other significance and different functions: the "teacher" functions as a sign, the "knowledge" or "knowhow" functions as an object, and the "student" functions as the producer of interpretants. The final meaning inferred by a language learner may be labeled an "interpretant". These constituents of the language learning process are all closely related by dynamic relationships that operate simultaneously, and that depends on each other. The meaning cannot be reached in the absence of one of the elements. The relations in the pedagogical triangle of Houssaye, then become respectively (teach becomes representing) – (learn becomes interpreting and readjust old or incorrect beliefs about language rules and vocabulary to new knowledge i.e. adequate language use) and (guiding becomes interacting or communicating) although, as explained in the previous chapter that interpretation is not exclusive to learners, both interlocutors in conversation produce and interpret signs. For instance, the student interprets the teacher's words, gestures, patterns, and audio-visual language learning materials. And second, the teacher interprets the students' feedback and thus could guide their inference toward shared leanings. In short, each of these relationships is based on the triangulation of two world views

about the same signs, the fact that entails a process of meaningful negotiation within the scientific inquiry.

### **3- Semiotic Model of Teacher/Student Interaction in Teacher-Guided**

#### **Inquiry:**

#### **a. Triangulation a Triadic Relation between the three components of Education**

As previously remarked in Houssaye's pedagogical diagram, only dyads of two elements are conceptualized together, by contrast, observations in EFL classes showed that semiosis in T/S interactions revolves around three constituents the teacher as representing language skills. The student is an interpreter of new linguistic signs and the third element is the dynamics of English as a foreign language use. To make meaning of this tri-dimensional learning experience, learners and teachers engage in inquiry, whereby their interpretations are triangulated. In order to represent this multidimensional relation between student-content-teacher, what is needed is a combination of the interpersonal communication schemata and the pedagogical process in one diagram. While teacher/ student interaction is a two ways communication, the relation of either of them with lesson content or the messages of their conversations is a matter of sign interpretation. Therefore, it is a relation of interpretation.

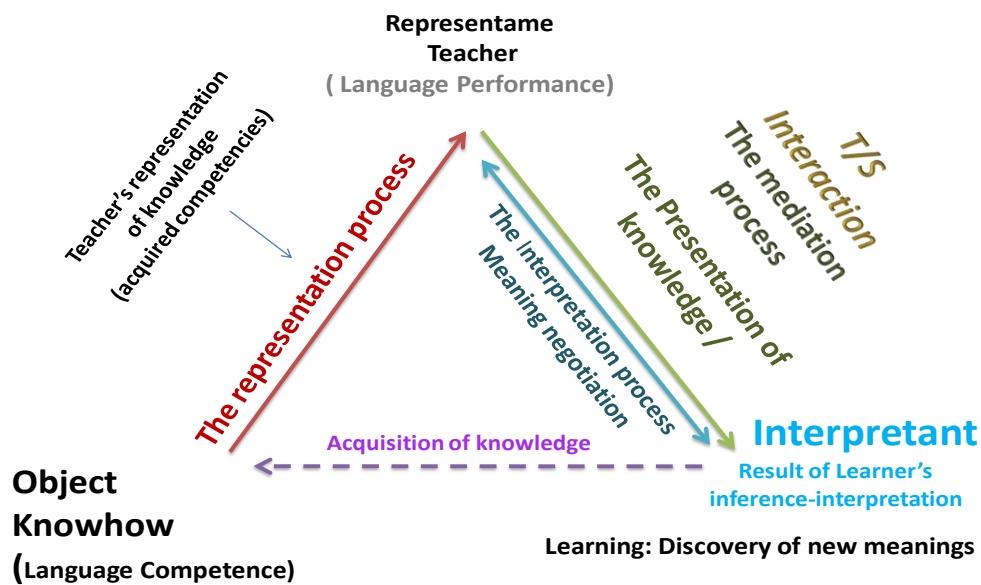
This process whereby two perceptions are integrated into a common vision is well expressed by Davidson's (1997) concept of "triangulation" which he defines as "The primitive triangle, constituted by two (and typically more than two) creatures reacting in concert to features of the world and to each reactions, thus provides the framework in which thought and language can evolve." (Davidson, p. 27) In other words the speakers in a conversation not only interact with each others' predefined views of the world but are both willing to negotiate their views about one common topic of discussion. Pietarinen (2006) asserts that although Peirce never fully explained his view of triangulation, Peirce's concept of "common ground" is very similar to Davidson's analysis. In the following example Peirce tells how he experienced this particular communication problem

## A Semiotic analysis of Vocabulary Learning in EFL Classes

I remember a blazing July noon in the early sixties when a fellow-student in the chemical laboratory, in whose company I was crossing the Harvard "College Yard", while the grass shone like emeralds, and the red-brick buildings, not red enough by nature for the taste of the curator, were blazing in a fresh coat of something like vermilion, – when this fellow student casually remarked upon the pleasing harmony of color between the grass, the foliage, and the buildings. With eyes feeling as if their balls were being twisted by some inquisitor, I at first understood the remark as a sorry joke, like the gibes of some Indian captive at the want of skill of his tormentors. But I soon found that it was but the trance of a sincere feeling, and then, by a series of questions, soon discovered that my friend was blind to the red element of color. A man may have learned that he is color-blind; but it is impossible that he should be conscious of the stupendous gulf between his chromatic impressions and those of ordinary men; although it is needful to take account of this in all interpretations of what he may say about colors. In the course of my examination of that young gentleman, which occupied several days, I learned a more general lesson, worth multiples of the time it lost me from the laboratory. (Peirce 1998 405)

In this example two different world views are crossed together. Yet, because of their drastic differences, in order for the two speakers to understand each other, a negotiation of meaning is necessary to find some middle ground on which both communication partners agree. Peirce commented on the striking contrast between the ruby red colour of the building with the lush green colour of grass surrounding it. He was surprised however by the discredit of his friend to this simple observation as he sincerely thinks that all the colours around them forms harmonious shades of gray. In surprise Peirce had to question his own perception by including some kind of element he did not know before about his friend, which is the hypothesis that maybe his interlocutor could be colour blind, after a series of questions, Peirce confirms his doubts and integrates the point of view of his friend. Without this piece of information the message would be difficult to understand. To find a common ground on which to build meaning is crucial in interpersonal communication, this can only be achieved by applying a triangulation process, which is at the basis of Peirce's theory of communication.

According to the perspective of triadic semiotics, this triangulation process between the utterer, in our case, the teacher's perspective with an the learner's perspective as an interpreter of signs, about a language skills (knowhow) which becomes part of learners competence.

**The Relation of Teaching and Learning in class**

**Figure 67 The Relations Relating the Teaching and Learning Processes in Class**

#### **4- Describing the Daynamic Triadic Relations of the Educational Triad**

From this point of view the basic elements of Houssaye's triangle keep their places in the diagram while the relations between them have to be modified

**The teaching process becomes the representation process** whereby teachers adopt a tradition of thought or a scientific community's views on knowledge. The teacher interprets information according to his or her collateral experience and context of application, thus generating his or her own meanings.

**The teacher** becomes a sign that represents knowledge from a particular perspective (the object). The teacher as lesson planner, material designer and tasks organizer plays the role of a sign representing abstract knowledge (Its object). His or her actions are determined by the nature of knowledge he or she represents.

**Functions of the teacher in this process** Information choice, materials adaptation, information display and organization. **(Planning the layout of different types of modalities in class)**

**The training process becomes the mediation process** After adopting a tradition of thought and a scientific community's views of knowledge, the teacher mediates knowledge from a certain point of view in a certain context for a certain audience. The teacher mediates his/her understanding of knowledge to learners through interaction, and the goal is to guide their

perception to filter only the information relevant to the context and the desired goals of instruction. A two ways communication (T/S Interaction) with learners is necessary to generate meaning and develop “know-how knowledge”.

**The teacher** becomes a sign that mediates meaning (knowledge in context) to learners.

**Functions of the teacher in this process** the teacher adopts a **guided- inquiry process** through which information is evaluated and communicated in interaction. (**Scaffolding through T/S interaction**)

**Type of knowledge learned** in guided inquiry is pragmatic and practical, (Competence development) in other words learning what? How? and what for? (why?) generates a learning experience in Thirdness for learners where they can improve their competences.

**The Learning process is an interpretation process** because learners do not have direct access to knowledge (to the entire language competence of the totality of the language users). Learners perceive knowledge through their representatives learning materials and teachers. In the EFL class, learners are asked to make sense of different linguistic and audio-visual signs in order to learn a foreign language’s system of signs and develop language and social skills.

Even though learners are encouraged to become more autonomous in their learning, their learning cannot be dissociated from other meanings performed by other agents of communication in their classroom (community of inquirers) including the teacher. Interpretation is a triadic process determined, on the one hand, by the sign (the message of instruction) in this case the teachers’ language in interaction as well as the teaching materials they use. On the other hand, learners’ interpretation is, also determined by the object (the content of the message) the nature of knowledge that determined teachers’ representations (signs) in the first place.

This general conceptualization of the educational process as triadic relation shows the interconnectedness of the three pillars of EFL teaching/learning. However, it does not precise the relation between the two aspects of T/S classroom interaction the communicational aspect between the teacher and the student, and the internal relations between the components of the sign ‘object- Representamen (sign) and Interpretant. While Peirce describes the inference as the action of signs in the mind, he also specified that the final interpretant is a results of a scientific enquiry within a scientific community, which supposes interaction of many minds. However, while the Peircean learning theory is obviously interactive in nature, it is still a challenge to represent its communicative and semiotic aspects with in an EFL teaching context. in a single diagram that shows both the interpersonal communicational aspect and the logical aspect i.e. process of



## A Semiotic analysis of Vocabulary Learning in EFL Classes

other hand, the sign–utterer–interpreter which shows the interrelated nature of the human interaction with the meanings within the conversations. By including both these trichotomies together the social dimension of communication is merged with the logical or semiotic dimension of semiosis to create a more flexible representation of the dynamics of communication.

The object–interpretant axis represents the relation between what is said and its meaning while the utterer–interpreter axis represents the relation between the one who utters the signs and the one who interprets them. It is important to distinguish between the sign and the utterer, because the same sign may exist before it is uttered and the utterer may utter countless other signs. In the same manner, in no way is the interpretant an interpreter for the interpretant is only the meaning the sign has to the entity that gives it its meaning, namely the interpreter. These distinctions are represented by the angles  $\alpha$  and  $\beta$ . Thus, the relation between the utterer and sign is that of "representation" in other words how the speaker understands and presents a sign to an audience. Conversely, the relation between the interpretant and the interpreter is that of interpretation i.e. assigning meanings to signs. Two main trichotomies emerge in the Figure on the one hand, the sign–object–interpretant which shows the meaning of signs emerges, and on the other hand, the sign–utterer–interpreter which shows the interrelated nature of the human interaction with the meanings within the conversations. By including both these trichotomies together the social dimension of communication is merged with the logical or semiotic dimension of semiosis to a more flexible representation of the dynamics of communication.

A simple way to adapt this triadic communicative schema to the teacher/student/knowledge (new knowledge of EFL) interaction is to suppose that 1- Relation  $\beta$  represents the relation of interpretation that relates the student to new knowledge, while 2- the relation  $\alpha$  is the relation of representation between the teacher and knowledge or the knowledge that the teacher possesses of the target language. In other words, the manifestation of the teacher's roles that enable him or her to organize, adapt, plan, and present target language-related knowledge in sign forms to students. The dotted arrows that link the utterer's Object to the Interpretant (e.i. the sign generated by the interlocutor or "interpreter" of the message) represent the necessary process of triangulation through which signs transform to become intelligible to both communication parties. This relation could be labeled matching (the matching of the students' interpretation of the signs they are provided with and the actual objects they represent (i.e. the correct grammar rule of a sentence) and/or with the teacher's intended meaning (i.e. the meaning of teacher produced utterances or instructions...etc.)

Pietarinen makes a distinction between three interpretants in that each corresponds to Peirce's immediate, dynamic and final interpretants. In communication, one sign may be subject to interpretation from two perspectives conjointly. Thus, it undergoes a process of seemingly infinite semiosis until consensus (triangulation and acceptance) is reached.

The intentional interpretant is the teachers' own interpretation of specific knowledge. (i.e. pragmatic knowledge of English, knowledge of teaching theories, knowledge of curriculums and official syllabuses, and textbook materials...etc). the intentional interpretant is the closer concept to the category of dynamic interpretant, as it represents the closest part of the sign to be determined by the object which the teacher tries to represent.

Teachers' interpretants become interpretable signs for learners, thus, giving rise to the second element on the object-interpretant axis. The communicative interpretant which is closer to the immediate interpretant, because it is the first understanding that learners make of the teacher's sign (intentional interpretant). This first understanding may provoke an effect in the learners' cognition and give rise to another sign in their minds. That sign is what Pieterinen has appropriately labeled the effectual interpretant which is the conceptual parallel of the final interpretant. Although, students' interpretants are also subject to further semiosis, it is possible to equate the effectual interpretant with the final interpretant, as both signs are the products of a scientific enquiry into theoretical knowledge (i.e. in the context of an EFL class, the teachers and the learners form a scientific community to discuss the prescriptive use of the target language, by following an inquisitive investigation).

This, also, suggests that the communicative interpretant has to be a speech act in the Austinean sense, that is, it is destined to incite a reaction from students. (for instance; an instruction to provide examples of a "wish" ( an illocutionary act), would elicit an utterance of a sentence that expresses the wishing expression (a perlocutionary act). If the sentence is formulated correctly, this is proof that the rule is internalized and the grammatical competence attained. However, if the sentence is incorrect or meaningless, that would suggest a problem in the pragmatic or the pragmatic competence. Either way, the effectual interpretant is the student interpretant of the teachers' communicative interpretant which in turn is determined by the teacher's intentional interpretant.

## **5- Schematic Representation of Semiosis (the Action of Signs) in Interaction**

Communication in class is about interpreting each other's signs and integrating each other's meanings in interaction. Both the teacher and the student are agents of communication trying to represent and interpret the meaning and reach an agreement (integration) of each other's intended meanings. There is no finite line separating the Semiosis of signs in the conversation between learners and teachers. For the relation of integration to be complete The role of the teacher is to guide and facilitate the interpretation of communicational signs in interaction to permit learners to get as close as possible to the teacher's intentional interpretants.

Meaningful teaching is learning as it requires the bringing together of teachers' and students' semiospheres by integrating each others' interpretations of the signs they produce. For communication between teacher and student to be effective in T/S interaction, the students interpret teachers' 'communicational interpretants and make their own effectual interpretants. These become signs for teachers to interpret. Both teachers' and students' meanings should be integrated and agreed upon for the interaction to have any meaningful impact on the learning process. The development of the triadic communication in classroom inquiry may be represented in the following diagram

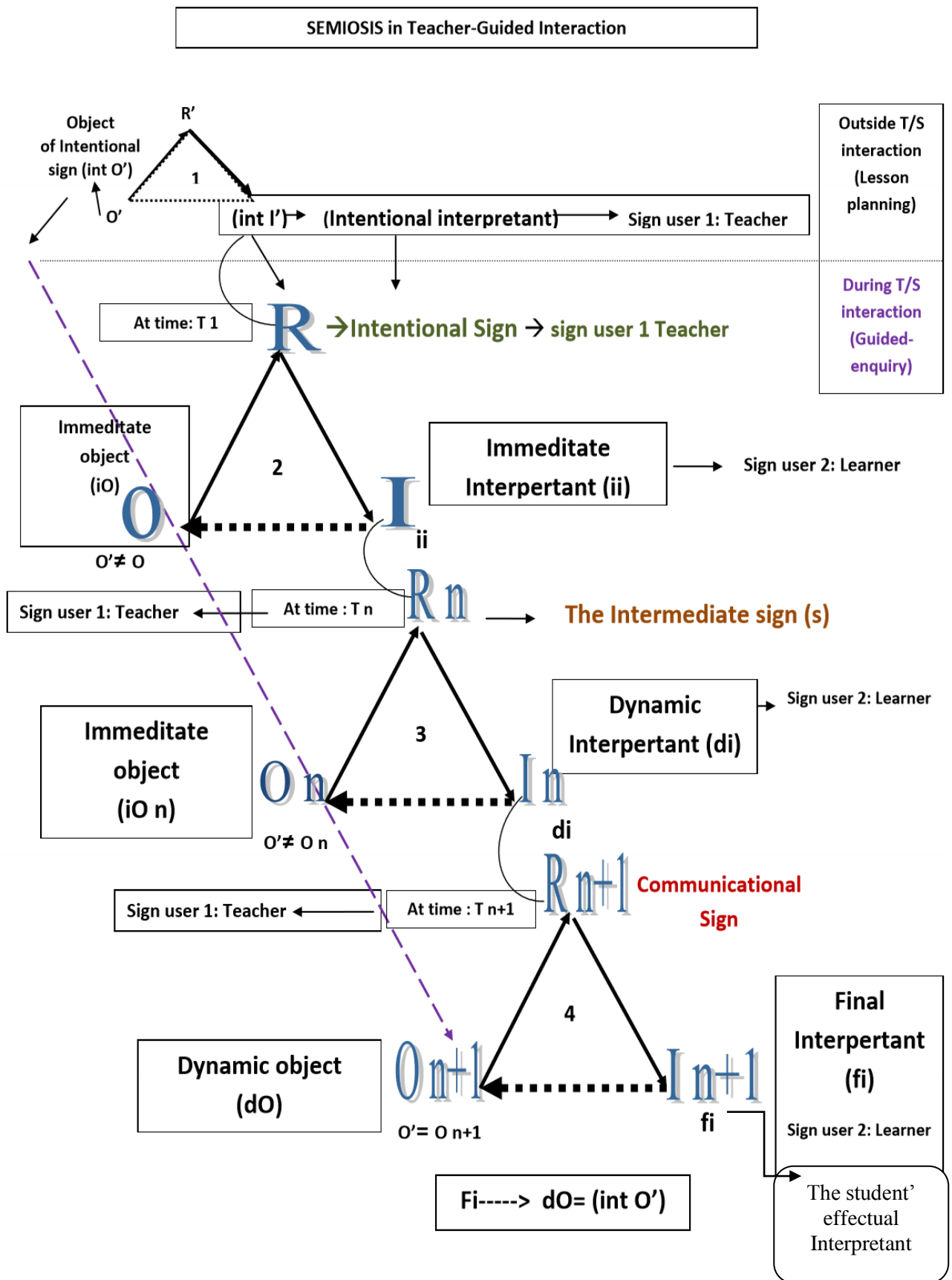


Figure 69 The Semiosis of Meaning Generation in T/S Interaction

**The diagram shows the process of a learner generating a new meaning using clues from the teacher**

1- While planning language materials The Teacher interprets a previous **sign R'** (which refers to an **Object (O')** from the teacher's "competence"), then generates an **Interpretant (I')**. When the teacher wants to teach (**I'**) it becomes the **Intentional interpretant (int I')**.

- During lesson procedure (performance) The teacher designs a sign to represent this meaning (**I'**) the **intentional interpretant (int I')** becomes a **Sign (R)** for students. The Teacher intends the **intentional Sign (R)** to represent the **intentional object (int O)**. But the teacher invites the student to make his/her own interpretation of the **intentional sign (R)**.

2- Student interprets (**R**) and generates an **immediate interpretant (ii)** which corresponds to an incomplete understanding of the on the **sign (R)**. We call this first understanding of the referent **immediate Object (iO)**. The teacher helps the student reach a closer meaning to the intentional object (int O)

- The Teacher analyzes the student's **immediate interpretant (ii)** then designs an **intermediate sign (R<sub>n</sub>)** which is the teacher's [understanding of the *student's sign + (n)*] by providing additional information, remediation or correcting misconceptions, the teacher's new sign (R<sub>n</sub>) refers to the intentional (int O).

3- Student's interpretant for (R<sub>n</sub>) is (**I<sub>n</sub>**) the **Dynamic interpretant** (which refers to **the object (O<sub>n</sub>)**). The latter is closer to the initial object (int O) but is not quite the same.

- Student' interpretant (I<sub>n</sub>) informs the teacher about the student's reasoning, and what "ground" to refer to for the next sign to be meaningful.

4- The teacher designs a **Communicational sign (R<sub>n+1</sub>)**, and is interpreted by learners as the **Final interpretant (fi)** which refers to **the dynamic Object (dO)** which is the same as the **intentional object (int O)**.

- The student interprets **the Communicational Sign (R<sub>n+1</sub>)** and generates the proper meaning. The teacher evaluates, and accepts **students' final interpretant (fi)** and provides feedback. **The final interpretant** is final because it refers to the **dynamic object** which is the same as **the intended meaning** the teacher's **intentional [interpretant/sign]** and that is the objective of the interactive guided-enquiry.

In other words T/S interaction provides space and motivates semiosis (meaning-generation process) as every sign that is generated or interpreted comes as a reaction to a previous sign and moves the conversation toward solving a comprehension problem and/or discover previously unknown meanings in the target language. Teachers generate signs and evaluate learners' interpretants. They guide the students' thinking and trigger their ability to self-correct false beliefs and theoretical misconceptions and to learn new ones.

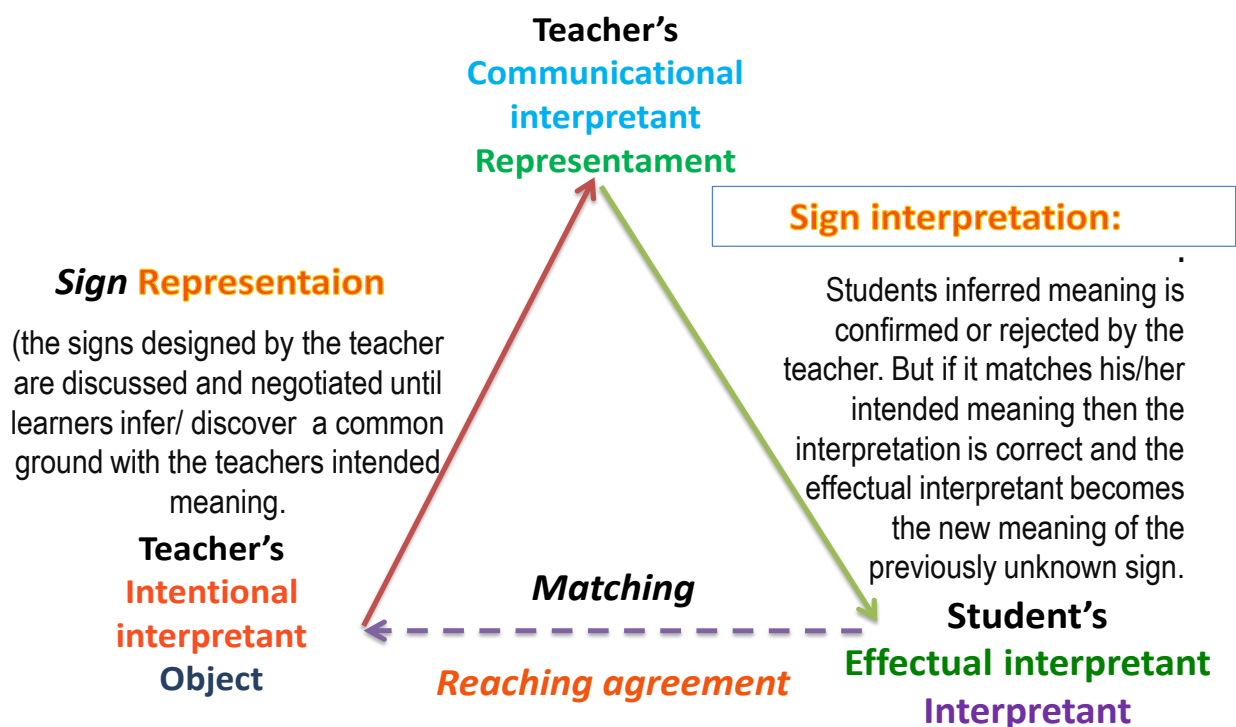
The educational sign is a meta-sign that culminates in a sign that makes sense to learners and refers to the object of the intentional sign. This sign finally affects the learners' cognition in a

way that they are able to produce the final interpretant that refers to the dynamic object. A communicational sign is a meta-sign it is a result of an interpretation process of multiple signs), 1- its object is the utterer's intentional interpretant of a previous sign. 2- its representamen is the communicational interpretant i.e. (it is the connection that the interpreter establishes between the utterer's meta-sign and the utterer's intention and the common ground on which to build meaning). 3- its interpretant is the interpreter's effectual interpretant i.e. (it is the expression of the interpreter's meaning the dynamic interpretant generated in the triangulation of both utterer and interpreter signs)

Communication goes both ways When learners try to communicate their own meanings to teachers, teachers interpret learners' communicational signs to get as close as possible to learners' intentional interpretant. When the intention of the student is clear, the teacher can work on helping the learner to transform initial meanings

**Communication goes both ways** When learners try to communicate their own meanings to teachers, teachers interpret learners' communicational signs to get as close as possible to learner's intentional interpretant. When the intention of the student is clear, the teacher can work on helping the learner to transform initial meanings

**SCHEMATISATION OF THE LEARNING META-SIGN IN T/S INTERACTION)**



**Figure 70 Representation of the Learning Meta-Sign in T/S Interaction**

### **5-1- How a meaningful sign is perceived in interaction Triadic sign/interpretant**

In his attempt at providing the three interpretants for the communicational sign in communication Pietarinen (2014) calls the intentional interpretant the “meaning” meant by the speaker or the sign user 1 to initiate a conversation or an enquiry process. This meaning will be intended as another sign for another interlocutor or sign user 2 in the conversation, and it becomes a “communicational sign which will be interpreted as “a communicational interpretant”.

Pietarinen says that the first sign in the conversation is also the result of a previous “semiosis” which is the speaker’s own interpretation of other signs, it is the meaning or interpretant of the sign user 1. This is why he labelled it as the “intentional interpretant”. Pietarinen focuses on the “interpretants” because they are the crucial progress markers of the semiosis process from the start of the interaction to the moment when students reach the intended meaning. This is why in his triadic communication model in dialogue, he only labelled three stages of comprehension and named them the intentional interpretant, the communicational interpretant and the effectual interpretant respectively. By the communicational interpretant, he wanted to point at the sign that conveys the meaning which will help a learner to formulate his own understanding of the teacher’s that matches exactly what he meant by the initial sign. And he refers to that last meaning as the students effectual interpretant which shows/ proves in effect that the learner did grasp the correct meaning of the intentional sign. But, the reader must keep in mind that an “interpretant” is a genuine meaningful triadic sign in itself as it refers to an object and is mediated by a representamen or sign vehicle.

The present study, however, makes no such reduction, in the following explanation of the T/S interaction semiosis. the relation/ interaction between both the teacher’s signs and the students’ signs (the interaction semiosis) will be represented diagrammatically. Learning occurs gradually within a teacher-guided enquiry. In the following diagrams of T/S interaction examples, it is specified, whose sign is interpreted by whom and what type of object is referred to by what type of interpretant at what point in the interpretation. The semiosis in this context starts with the first sign in the conversation i.e. (the initial or intentional sign) It is worth mentioning that in this context these terms will be used as explained below

**The intentional interpretant** the teacher's interpretation (the meaning/ interpretant) of a previous sign, before it is used to represent a learning goal.

**The intentional object** It is simply a language competence that cannot be experience directly. It is what is represented by the previous signs that were studied and larned by the teacher until he/ she reaches a fairly accurate understanding of the particulars of the English language use and become proficient in it. When the teacher performs in the target language and endeavours to teach EFL learners, his own competencies will be the origin of his teachings.

The intentional object will be used as the specific learning goal of the inquiry process in the T/S interaction excerpt. For instance if the conversation goal is learn the meaning of a new word in the context of a text or learning situation, the intentional object is the meaning of that word in the target language as understood by the teacher. This meaning is probably accurate as the teacher is proficient in the target language and possesses the appropriate vocabulary/ pragmatic competency. In conversation, the learner can only interact with the teacher and with the teachers' competence and particular interpetants, not the entire target language competence of all the English language users in the world.

Thus, the intentional object is the goal of the interaction, the object that students should be able to refer to with their own (final interpretant) after they finally understand and learn the meaning of the new word in the target language and what it refers to in context.

**The intentional sign (R)** this is the sign or representamen used by the teacher to initiate a task/ conversation. (It also was the result of another interpretation process in the teacher's mind.) However, when the teacher initiate a conversation with a learner or learners, the teacher's interpretant becomes the initial sign in the conversation. And it is called the intentional sign.)

**The immediate interpretant** it is the first interpretation of the communicative sign. when the student first understand the "initial sign" it is not always a precise or a complete understanding of the sign. Often the learner produces an inaccurate interpretant which does not refer to the intentional object. Instead it refers to another object i.e. the immediate object. **The immediate object** is what the learner thinks the teacher is talking about. It is the first attempt at finding what the teacher means, what he/ she is referring to.

Because the learner isn't able to get the teacher's meaning immediately after the later provides a sign ( a picture a word, a clue, a task , a question) i.e. (iconic, indexical or symbolic sign), The T/S interaction becomes a process of teacher-guided enquiry in which the learner is

guided or is provided with a number of intermediary signs, which in different manners, refer all to the intended object of the initial sign, to lead their interpretation to the correct interpretant that will refer accurately to the intended object of the conversation.

**Nature of the intial, communicational and final signs, in T/S interaction**

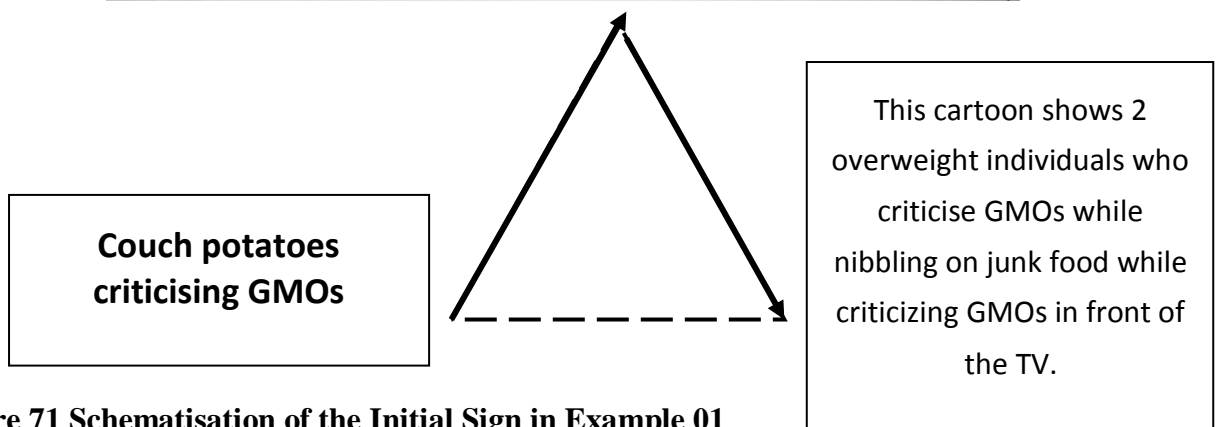
Example 1 from Mrs B' class about the effects of unhealthy food on people's life styles

**The Teachers' initial sign/ interpretant** The intentional sign icon interpretation cartoon contrasting unhealthy food with GMO's (genetically modified organisms)

R0 Educational printout of in the form of a cartoon stip.

O0 Illustration of an ironic situation.

I0 The illustration will help learners grasp the concept of irony and teach them to describe unhealthy lifestyles in their own words.



**Figure 71 Schematisation of the Initial Sign in Example 01**

**The communicational sign-chain (directing intermediary interactional signs)**

R1 What does the physical appearance of the two cartoon figures say about their habits? (Initial interactional sign of the communicative sign-chain)

O1 The people have health problems and exhibit bad eating habits (the immediate object)

I1 The cartoon figures look fat, lazy and seem to love crisps, fries and soda drinks. (Immediate Interpretant)

R2 What are the two people doing? (intermediate interactional sign in the communicative sign-chain)

O2 They eat unhealthy food. (The immediate object)

I2 They watch TV and nibble fatty foods while sitting on their couch potatoes. (Immediate Interpretant)

R3 Is the previous actions a sign of a healthy lifestyle? (Another intermediate interactional sign)

O3 The cartoon figures lead an unhealthy life style. (Immediate object)

I3 Laziness and unhealthy food consumption are signs of unhealthy habits. (Immediate Interpretant)

R4 What are they saying?

O4 It is ironical of avoiding unhealthy food only to take processed foods with similar health risks. (Immediate object)

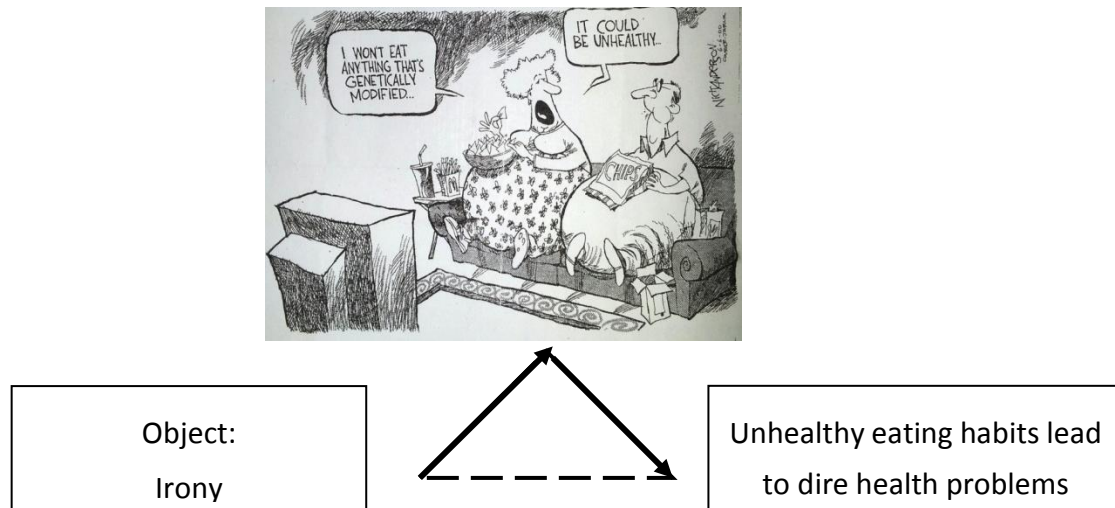
I4 They think GMO's are unhealthy, but they ignore the fact that they are taking unhealthy food and are suffering the consequences of doing so.

**The effectual sign (whose interpretant is the student's final interpretant.)**

R5 Is the cartoon sad or funny?

O5 The intentional sign icon (cartoon) illustrates the concept of 'irony'. (Final interpretant)

I5 It is funny, i.e. the cartoon has an ironic tone (dynamic interpretant)



**Figure 72 Schematisation of the Effectual Sign in Example 1**

Having discussed how the communicational meta-sign constructs a cognitive bridge between the teacher's intentional sign and the final interpretant (i.e. The goal of a learning sequence; for instance, the meaning of the linguistic concept or a language competence), the final section of this chapter addresses the different ways in which teachers structure the learners' inference in a vocabulary learning situation. The results of the semiotic analysis of the learning procedures within the teacher-guided enquiry will be discussed. Excerpts of T/S interaction from all ten lesson scripts are analysed according to the semiotics learning model of Nôth which is inspired by the Peircean triadic sign stipulates that three main learning scenarios are followed in different types of EFL lessons to lead learners' enquiry to the discovery of the meaning of new words in the target language without having recourse to code-switching. The following is a review of Nôth's language learning semiosis analysis and explains the nature of teaching strategies used by teachers to enhance meaningful learning in EFL classes.

## **6- Semiosis of Vocabulary Learning in Enquiry Learning Senarios:**

### **6-1- Winfried Nöth's Semiotic Model of Learning New Words**

In a paper entitled "The Semiotics of Learning New Words" (2014) Nöth discusses processes of interpretation and understanding of signs by relying on some of Peirce's most significant works (Peirce, 1867; 1903). In these papers, Peirce abundantly uses examples from second language vocabulary teaching and learning to draw his insights, and illustrate possible implications of his fundamental theories on signs in the fields of knowledge acquisition in general and more specifically in Peirce's argument that "a well-understood sign is one that represents an object and creates an interpretant, is essential to the understanding of how new words and signs in general can be taught and learned." (Nöth, 2014, p 446)

Nöth reopens the debate over the Meno paradox of the impossibility of learning the unknown, under the light of the Peircean triadic modal of the sign. Nöth explores the role of sign-object triad in learning new words and stresses the necessity of "collateral experience" of the object of a sign in understanding this process. (Nöth, 2014, p 453)

The Meno Paradox refers to the logical impossibility of learning unknown words. Putting it differently, if the word is taken as a linguistic sign, it is impossible to interpret it when the object of this sign is unknown or very vaguely known to the interpreter (the learner). It is indeed impossible to learn a word when we do not know the object which it represents. There are different degrees to which the object of a sign may be unknown and needs to be learned for the word to make sense to the learner. The object may be altogether unknown or it may be known too vaguely. The learning of a new word is impeded because the learner's acquaintance with the object denoted by the word is too vague (Santaella, cited in Nöth, 2014, p. 447)

When a word is completely new for a learner, it has no meaning and no reference. It refers to nothing recognizable in the learner's Semiosis. That is, the meaning cannot be derived from the very form of the word the learner is presented with. Because linguistic signs are merely symbolic signs characterized by the concept of arbitrariness, we cannot learn what a word means by examining it in itself. Words cannot be learned in isolation. By merely scrutinizing the word *froid*, a learner of French can never find out that it means *cold*." (p 447)

The only way we learn new signs is by means of signs we already know. Semiosis as described by Peirce explains the processes by which signs, symbols and words grow into other more complex, more genuine signs (Nöth, 2012).

A word is learned when the learner is familiar with all three correlates of the verbal sign, that is, the learner knows how it sounds, how it is pronounced (as a sign), what it refers to or represents (its object), how it needs to be interpreted, or what it means (it's interpretant). When the triad is fully developed in a learner's mind, the word does not need to be learned any more. Words require learning when one or two of the three correlates of a sign are unknown (or known too vaguely). (Nöth, 2014, p. 447)

The situation of learning differs according to which one of the three correlates is out of reach, and which one needs learning. Thus, Nöth distinguishes three main scenarios of learning new words.

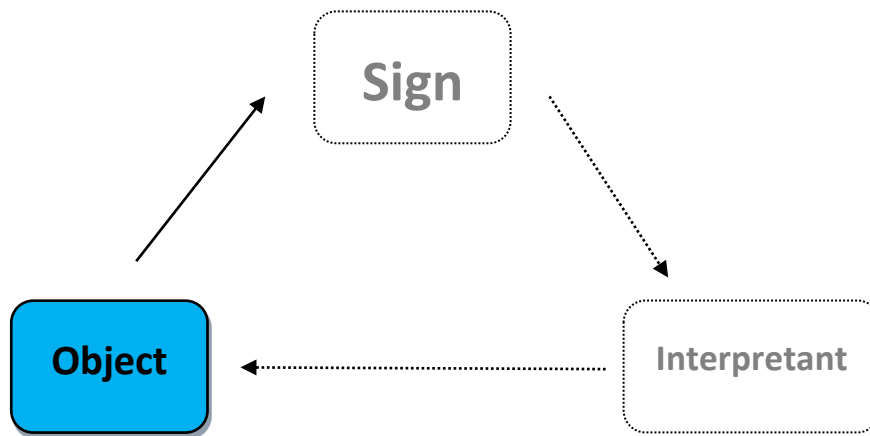
### **7.3. Types of Vocabulary Learning Scenarios**

#### **A- Familiar Object, Unknown Representamen**

The object is available in the learners' semiotic world, as they experience them in their own language, while the sign (the spoken or written form of the word in the foreign language), and the interpretant are the missing correlates. This scenario relies heavily on the learner's native language collateral experience

For instance learners experience, different objects coldness, hotness, rightness, happiness...etc, and may refer to them with specific signs from their native languages. While speakers of the target language may refer to the same objects using completely different linguistic signs. This does not mean that the objects are not the same. Learners then may have access to a part of words' meanings independently from the words' form, or substance. Such a scenario is unthinkable in the Saussurean tradition which stresses the mentalist feature of signs. As the signified and the signifier are both in the mind and the resulting sign has value only within the language system in which it exists in opposition with other signs. Conversely, Peirce argues that what a word means comes from experience, before it is incorporated into the system of linguistic symbols of the learner. Here, not knowing the sign that represents the known object also impacts negatively learners the interpretant.

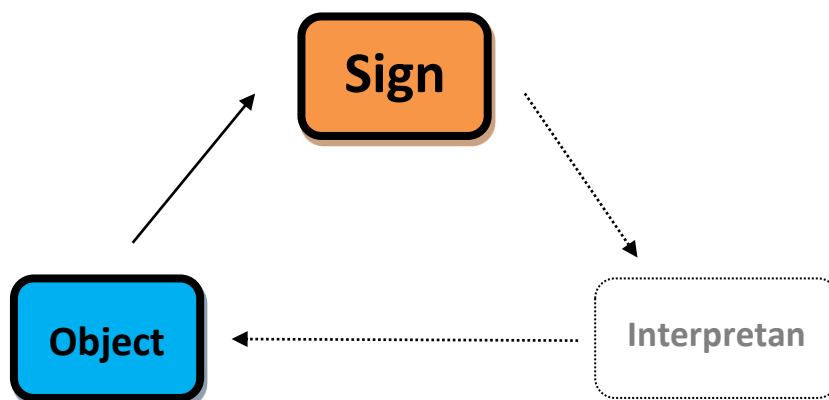
There is mediation connecting the sign to a known object. Learners need to cognize the sign (the word) before Re-cognizing it by connecting it to its object. Thus the interpretant is also missing in this situation.



**Figure 73 Familiar Object, Unknown Representamen**

**B- Familiar Object, Known Sign, and Unknown Interpretant**

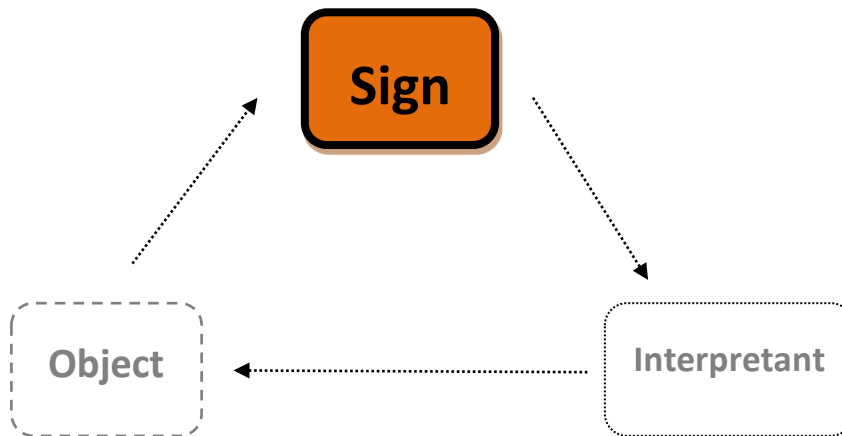
In this case, the learner is familiar with the object of the word to learn. The learner might as well have encountered the sign (the word in the target language) but has no clue that this foreign word means something that he/she he knows (refers to the object of his experience). Here the habit of associating the unknown sign with the known object is required. To learn a symbol is to learn the habit by which it is associated with its object. (Noth, 2014, p 450). In other words, a word form and what it refers to may be known to learners, but they do not know that they do. They won't be able to recognise the meaning of the word when used in a different context, because they cannot say clearly that "Z (this written or spoken word), means Y, in this sentence".



**Figure 74 Familiar Object, Known Sign, and Unknown Interpretant**

**C- Familiar sign, unknown object**

This situation occurs when the learner is, confronted with a new word and knowing neither what it refers to nor how it does so. For them, the word at hand is a symbol without an object and an interpretant. Without previous knowledge of the object, the learner cannot interpret this word.



**Figure 75 Familiar Sign, Unknown Object and no Interpretant**

**1. Summarizing, the T/S interaction semiosis and relating it to the different semiotic learning scenarios**

The role of the concept of the “ground” or the (sign-object) relation in creating intermediate/ communicational signs in conversation can be explained as follow. The ground of the intermediate signs relates to the intentional object or (the meaning intended by the teacher). The teacher may provide different types of intermediary signs which refer in one way or another to the initial sign of the conversation. The teacher helps the learner to understand or reach a dynamic interpretant of the object if the intentional sign he/she utters, writes or draws,) communicating (icons, indexes, and symbols) that refer to the same object, while monitoring the types of interpretants that the learner produces to make sense of the intermediary signs until eventually producing the communicative sign which will make ( perfect) sense, and refer to the dynamic object (intended by the teacher) in a way either referring directly to the teachers' intentional interpretant which refers indirectly to the intentional object (the object of the intentional sign, that the teacher wants to communicate to learners try to discover through a series of clues and by participating in a guided interactive enquiry process.

A Semiotic analysis of Vocabulary Learning in EFL Classes

The object of an unknown sign in the target language (the sign which the teacher intends as the initial point of the discovery process) is actually familiar to students in their first or second language or they may have encountered in their culture, but they do not know that that it is referred to by the strange new sign and may not be able to make any relation between the two. In this case, the teacher may provide, iconic signs as an intermediary to refer directly to the student's knowledge of the object in question from their background experience.)

In another case, when the intentional Object isn't familiar to learners, the teacher may endeavour to help learners experience the object through indexical and iconic signs first, before providing symbolic signs to relate the unfamiliar object to the unfamiliar sign in the context of a sentence or a text.

**Table 74 Summary of the Three Semiotic Scenarios of Learning New Words**

## Nöth's Learning

<p><b>Familiar Object, Unknown sign:</b></p>	<p>The objects are available in the learners' s students experience them in their own la signs, which are the spoken or written for foreign language, and the interpretants a correlates. This scenario relies heavily on experience</p>
<p><b>Familiar Object, Known Sign, and Unknown Interpretant:</b></p>	<p>In this case, the learner is familiar with th to learn. The learner might as well have e in the target language i.e. (the sign) but h foreign word means something that he/sl refers to that object. Here the habit of ass sign with the known object is required.</p>
<p><b>Familiar Sign, unknown Object:</b></p>	<p>This situation occurs when the learner is word and knowing neither what it refers to the students, the word at hand is a symbol an interpretant. Without previous knowl learner cannot interpret this word.</p>

## **7- Discussion of the Learning Scenarios Analysis Results:**

As explained above in order for a new word to be assimilated in the learners' repertory, it requires the presence of three distinct signs at the same time a symbol which is a complete sign has all three states of a sign namely, icon index and symbol. Icons are signs that resemble the objects they represent; indexes have a relationship of causality with what they denote, while symbols have merely an arbitrary relation to their objects (p. 2).

### **7-1- The new word is learned as a symbol through icons and indices**

In the example presented in table 5, the linguistic sign “the Exxon Valdez wrecked at the coasts of Alaska” was provided to students at the beginning of the lesson to ponder about it. The word “wrecked” was learned as a symbol whose object was unknown, using indices and icons. The goal of this teacher-student interaction segment was to interpret the utterance “the Exxon Valdez ship wrecked near the coasts of Alaska”, which was introduced very early in the plenary phase of the lesson. Students were told to open their textbooks and read the instruction and comment the photograph. It was clear from the onset that the teacher-student interaction was mediated by students' textbook instructions.

**Table 75 Example 01 of Classroom Abductive Reasoning**

Lesson 1 Using the future passive for writing a press release
15. T1 Okay. What happened to the Exxon Valdez do you remember?
16. T1 Look at the photo. What happened?
17. S1 It was wrecked off the coast of Alaska,
18. T1 Yes! It was wrecked on the coast of Alaska. Do you know what does that mean?
19. Ss [SA]
20. T1 Look at the picture! Look at the image and tell me what happened and what is it caused by?
21. S2 Oil spilled up.
22. T1 Indeed, the ship was carrying oil pointing at the black matte displayed in the photo. Look, what happened to the beach?
23. S1 Polluted
24. T1 It was polluted. Just polluted? By what?
25. Ss Oil.
26. T1 Yes, then what happened to the Exxon Valdez first?
27. Ss Reading from the book “It wrecked in the sea”.
28. T1 Yes, the ship was destroyed and the oil got out and spilled on the beach.

## A Semiotic analysis of Vocabulary Learning in EFL Classes

Students were given a few moments to discuss the photograph in pairs. This sequence involved an IRF. Basically the teacher had prior expectations (assumptions that students might not understand the meaning of the word “wrecked” though it was part of the caption below the photo shown on the textbook page). The teacher asked the question to clear her doubt. The question in line 01 served two purposes one was to initiate the plenary phase of the lesson, and the second was to test the teacher’s initial hypothesis about a possible communicative difficulty concerning the referent of the expression “ship wreck”.) The goal was to explain to learners the meaning of the difficult word “wrecked”. In order to achieve that goal, the photo was used as an iconic sign of the meaning of the word “wrecked”. The picture represented the damages of a large oil spill on the beach, and a few workers wearing overalls who were trying to clean the contaminated zone. Nevertheless, it was the intention of the teacher to gradually bring her students to the photo and make the link to the meaning of “wreck”.

The first step the teacher undertook was to ask students what happened to the “Exxon Valdez”. She prompted learners to infer meaning from the photo first, in line 2. Then she led the learners to match their interpretation of the picture with the concept to which the word ‘wreck’ referred to. Accordingly, the word “wrecked” was the word that needed to be interpreted. It was a known sign without an interpretant. In order to infer the meaning of this sign, the learners were asked a few questions about the photo.

Students responded to the question in the first line by reading the textbook. But the teacher was not sure whether the learners understood what they were reading i.e. whether learners made the link between the picture which was the sign and its object which was the concept of oil spilling as a result of a ship wreck. So, she asked them explicitly if they really understood what they read in line 4 in table 5. The students kept silent, which the teacher interpreted as a sign of ‘incomprehension’

The hypothesis of the teacher was confirmed. She began a series of observations about the photo to lead learners from cause to effect, in order for them to understand what truly happened to the oil carrier ship. (Lines 6 to 13) The photography was an iconic sign of an oil spill catastrophe with which it shared some resemblance and some indexical features as well. Prior to its spill on the beach, the oil was carried on board of the Exxon Valdez ship. Yet, since it spilled out, some disaster must have happened. So, there was a strong indexical link between what happened to the ship and the oil spill. As a matter of fact, it is known that liquids can only spill out of a broken or damaged container. In order to draw this conclusion, the learners relied on their deductive skills. Thanks to the photograph’s iconic and indexical signs, the learners

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were able to understand what happened using their collateral experience even without understanding the symbol “wrecked” When the learners became aware of the chain of events leading to an oil spill disaster, and acquired the information that English people use the expression “ship wreck” to refer to similar conditions, the students learned to link the linguistic structure to other objects of experience; they established the correct interpretant of the question in line 1 (or the initial meaning meant by the use of the photograph). The next example describes the other teacher’s approach to classroom interaction.

**7-2- The Word as the Representamen of a Familiar Object**

Teachers usually predict the difficult words that may cause a comprehension problem to students, and thus, try to explain them in advance. Some teachers do not just give the equivalent of the word in the learners’ first language. Instead, they initiate a conversation with students leading them from what they already know to what they need to learn.

**A- The New Word is learned as the Representamen of a Familiar Object**

**Table 76 Lesson 2- Example 02 Writing a Press Release [01-13])**

<p><b>Lesson 2 Writing a press release [01-13]</b></p> <ol style="list-style-type: none"> <li>1. T1 Today we're going to deal with something else. When two cars collide, what do we have?</li> <li>2. S1A collision</li> <li>3. S2 An accident</li> <li>4. T1 Yes! An “accident” or “collision”</li> <li>5. T1 Now when you have the same accident in the air, this time, when two planes have an accident what do we call it?</li> <li>6. S1 A crash.</li> <li>7. T1 Good! Write it on the board. (The teacher called the student to the board)</li> <li>8. T1 And what if it happens in water, in the sea?</li> <li>9. S3 A crash.</li> <li>10. What do you call an accident between two ships? ... a crash?</li> <li>11. S3 “Un naufrage”.</li> <li>12. T1 Ok! We just called an accident in the sky a crash, but when it happens in the sea, it is called a “wreck” or “wreckage”.</li> <li>13. All right then, when an accident happens in the sea or the ocean, it is called a ‘wreckage’. So for today we're going to the deal with the Exxon Valdez wreckage in the sea.</li> </ol>
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Teachers usually predict the difficult words that may cause a comprehension problem to students, and thus, try to explain them in advance. Some teachers do not just give the

## A Semiotic analysis of Vocabulary Learning in EFL Classes

equivalent of the word in the learners' first language. Instead, they initiate a conversation with students leading them from what they already know to what they need to learn.

Table 6 illustrates a segment of the second recorded lesson. The aim was to get the students write a press release about an oil spill catastrophe. Segment 1 of the lesson was an interesting teacher-student interaction that displayed a specific teaching strategy or, in Nôth's terms, a learning scenario. The teacher adopted the second sub-scenario of the first scenario which was explained earlier. In short, the characteristic of this scenario is that learners were familiar with the object of the new word but whose representamen was completely unknown to them.

The teacher (T1) started by asking an easy question "When two cars collide, what do we have?" learners gave a "one-word answer". The student (S1) used his past knowledge of noun formation to form the noun of the verb (line 2 "to collide"). Another student (S2) suggested a word with which she was more familiar (line 3 "accident"). For both students, the teacher approved and gave positive reinforcement using words such as "yes", and "good". The question that followed was asked in the same way as the former and served to create the context for learning a new concept. From line 2 to 7 the teacher relied on a didactic tool to guide the students. She directed the attention of students to the consequences of a type of accidents linked to a new word, revealing its indexical aspect, i.e. by explaining the causal relations of the word to its object. When students were asked what was the word for "an accident in the sky", only one student provided the right answer "crash." The teacher offered positive feedback and wrote the words on the board, providing learners with both the oral and the written forms of the words. (In other words, she gave both forms of the signs for the concept she had just explained). The next question in line 8 was about the same concept but in a different context. This time no one knew what the word for an accident in the sea was. After a few trials, student S3 expressed the word in French. The students probably had read or had heard about accidents in the past. They were familiar with the ideas conveyed in the text, without necessarily knowing how to express them in English. The precedent inference process made it possible for learners to "see" what the teacher was talking about. The teacher made an appeal to learners' collateral experience to make analogies using 'iconic descriptions'.

At this stage the students became familiar with the object of these descriptions when teacher T1 asked "... it happens in water, in the sea?" And "...an accident between two ships?" However, the students were not familiar with the sign in the target language (the English sign) for that object i.e. (the concept of "wrecking"). Nevertheless, one student S3 attempted an

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answer as he provided a word in French “un naufrage” which means “a wreck” in English. This indicated to the teacher that the student was familiar with the concept. The idea of shipwreck got through to students thanks to a combination of linguistic background and their collateral experience and with the help of analogy. Also, the intervention of S3 helped clarify the idea for those who did not get it.

Prior to the discovery of the appropriate word in English for the discussed concept, the learners participated in a genuine communication with the teacher to bridge the communication gap they experienced when they missed the meaning of the word “wreck”. In other words, learners showed real desire to discover the English word for the topic of the discussion. The teacher exploited learners’ eagerness to learn to provide them with the new word in line 12, thus, completing all three elements of the new word, which is a symbolic sign. The word was provided in the context of a verb-phrase in English “it is called a ‘wreckage’”. This was the interpretant the class was looking for. If the learners become able to use the word “wreck” in a meaningful manner in the future, they will internalize the interpretant. which becomes in this way, part of their collateral experience.

The comparison between the two segments of the same lesson performed by two different teachers in two different classes showed an interesting contrast in the way information are presented and how their meaning is inferred. Although, the teachers’ use of abductive reasoning showed similar patterns, it resulted in adopting two different approaches to concept building and meaning-making.

### **7-3- Illustration of the example above**

#### **A- Dialogic conception of Semiosis in T/S interaction Example 2**

In the Excerpt 1 from Lesson 1 (writing a press release) a new word is learned as a symbol through icons and indices. The goal was to explain to learners the meaning of the difficult word “wrecked”. In order to achieve that goal, the photo was used as an iconic sign of the meaning of the word “wrecked”. Even though learners mechanically related the text with the picture, they obviously couldn’t make the link to the concept of damage caused by oil pollution. Nevertheless, it was the intention of the teacher to gradually bring her students to the photo and make the link to the meaning of “wreck”.

The word “wrecked” was the word that needed to be interpreted. It was a known representamen (given in the task instruction) without an interpretant (students did not seem to understand its meaning) therefore the sign/ the symbol isn’t interpreted yet and is unknown to

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learners. In order to infer the meaning of this sign, the learners were asked a few questions about the photograph and led through a number of icons and indices to relate the written word to its meaning in the English language.

Observations about the photo to lead learners from cause to effect, in order for them to understand what truly happened to the oil carrier ship. (Lines 6 to 13) The photography was an iconic sign of an oil spill catastrophe with which it shared some resemblance and some indexical features as well. The photograph wasn't representative of an actual ship wreck, but showed the aftermath of an oil spill on a beach. It was used to convey the devastation of an oil spill catastrophe on the environment through cause and effect.

The following figures explain the interplay of signs through the T/S interaction that took place in the first phase of lesson1. The learners' interpretation process of unknown signs to meaning making is examined in details using the concepts of intentional, communicational and interpretational interpretants.

During the previous session, students learned how to use the past passive to describe the importance of the Amazon forest. This lesson was about using the future passive to make promises. The teacher began with a comprehension task where she helped learners to understand the learning situation leading to a writing task. The learning sequence begins with learners trying to understand the task instruction. They struggled with the words "the ship wrecked" so the goal of the first learning sequence is to find out What does the word "wrecked" in the sentence "The Exxon Valdez oil ship wrecked near the costs of Alaska?" mean?" The teacher helps them by initiating a conversation about it so in the first learning sequence, Indexical and symbolic signs are used to help learners infer the meaning of the word "wreck".

**The initial sign** is the word "ship wreck" that remains a subject without a predicate i.e. a Rhematic sign, until used in the context of a full sentence

"The word shipwreck (Y) is / means .....definition (Z)"

**The communicational meta-sign, i.e. chain of interactional signs**

**Figure** Diagram 1- semiosis in T/S interaction- inference of word meaning in context.

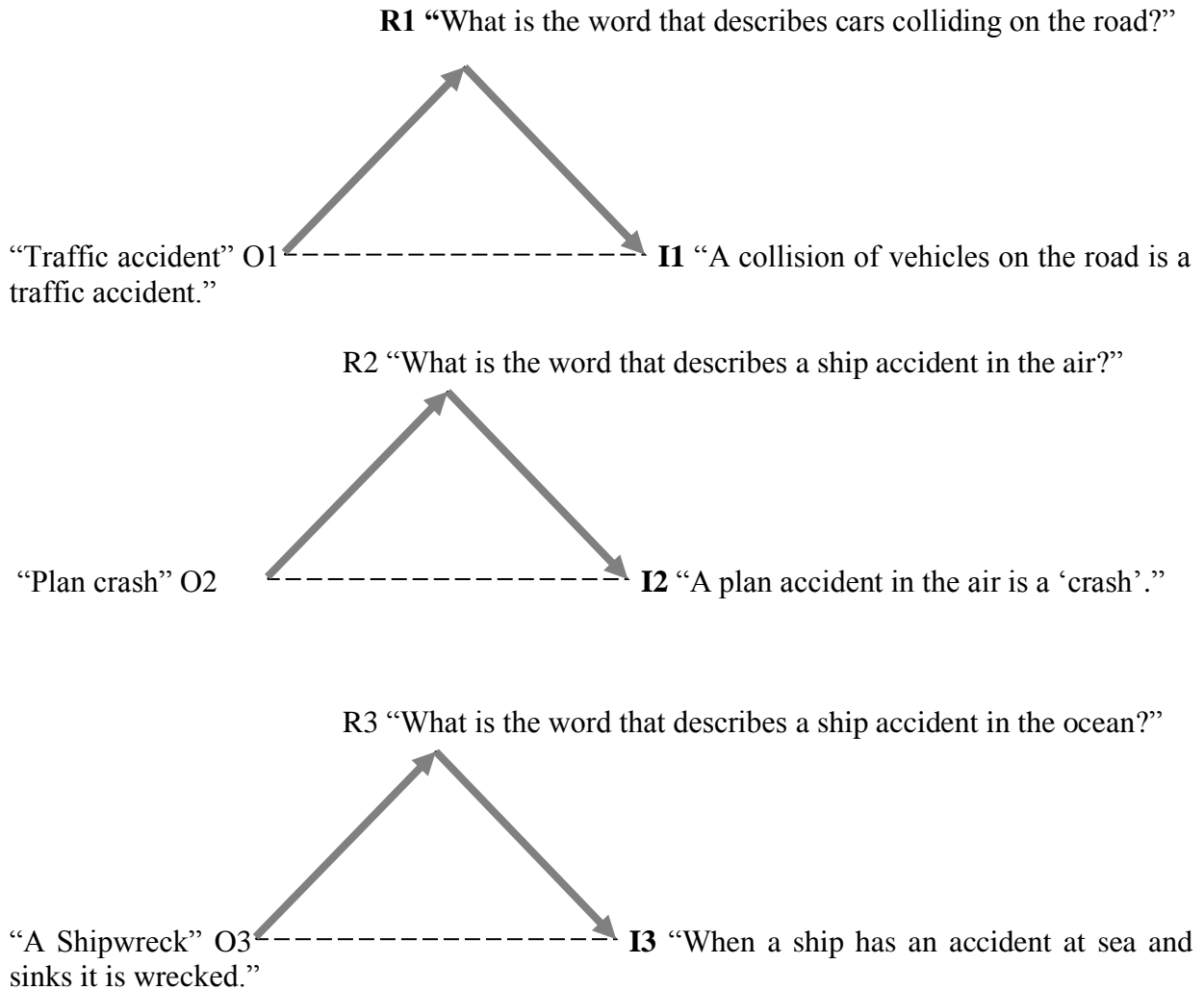


Figure 93 The communicational meta-sign, i.e. chain of interactional signs

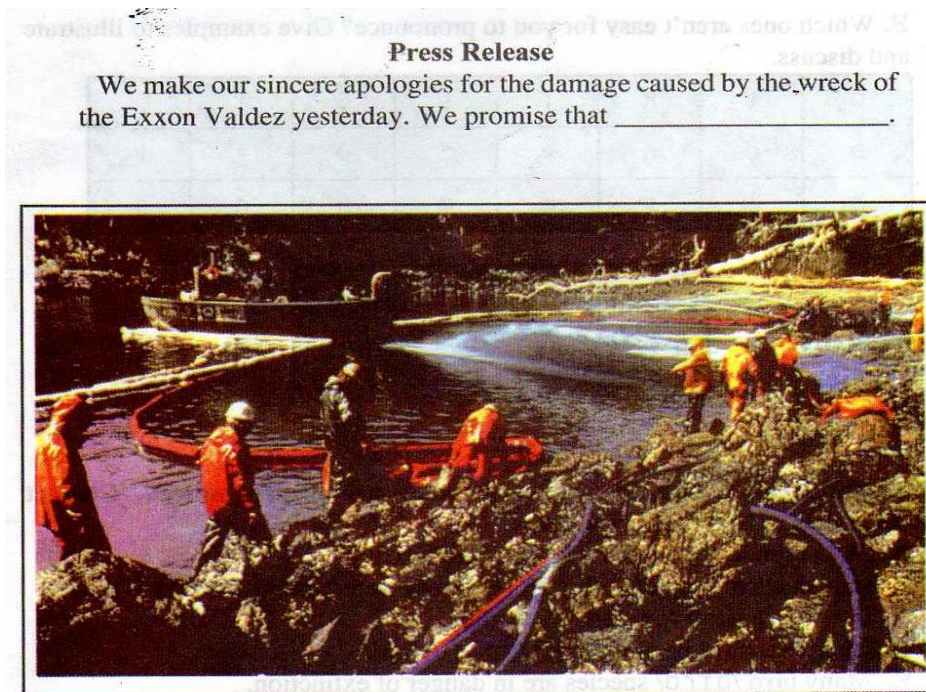
**The effectual sign** is the meaning of the concept of “shipwreck” in the context of the learning sequence. In the first learning sequence the teacher presents an **intentional sign** (a Rhematic symbolic sign in the form of a question about a word in the target language.) at the end of this sequence, learners gained knowledge of two more signs symbols (“Crash”, “Wreck” which are related in the idea of “transportation vehicles getting into an accident”

After learners were able to bridge the comprehensions gap for the missing word ‘wrecked’, they have to show their understanding of the learning-situation from the written task instruction and the photograph as the only clues.

**The Initial Sign**

**Teacher' Initial Interpretant**

In the second learning sequence, the teacher invites students to read the task instruction on page 63 and try to guess the event represented in the photograph As depicted in the next diagram

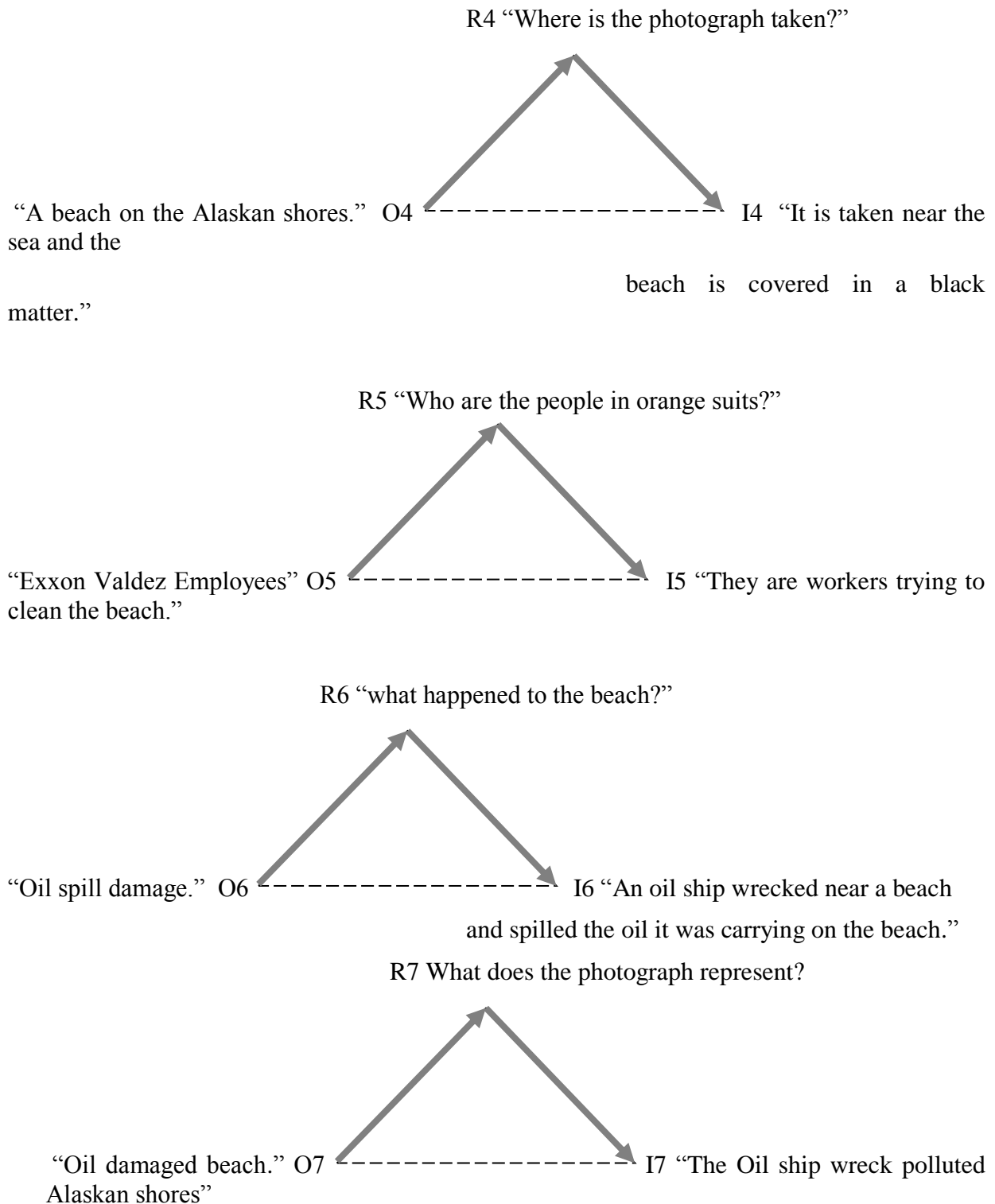


**Figure 76: Picture from Textbook p 63- The Exxon Valdez oil spill incident**

**Scematisation of T/S Interaction Semiosis of Interpretation of Iconic Sign- Example 2.**

At the beginning of the second sequence, when students are presented with the sign icon they couldn't formulate an adequate **immediate interpretant**. Thus the teacher guided their attention with a few questions. After following the sign-chain students reached the **dynamic interpretant** of the sign R "What is this photograph about?" which is I "**The Oil ship wreck polluted Alaskan shores**" which in turn refers to what the photograph shows (the immediate interperant), but still, the goal of the entire learning sequence was to grasp the meaning of what happened for the environment. To get learners to comprehend **the dynamic object** of sign chain, which happens to be **the intentional interpretant/sign** of the teacher, (i.e. the reason why the sign is chosen to represent the written task instruction.)

**The Communicational Interpetant / Interactional Meta-Sign**



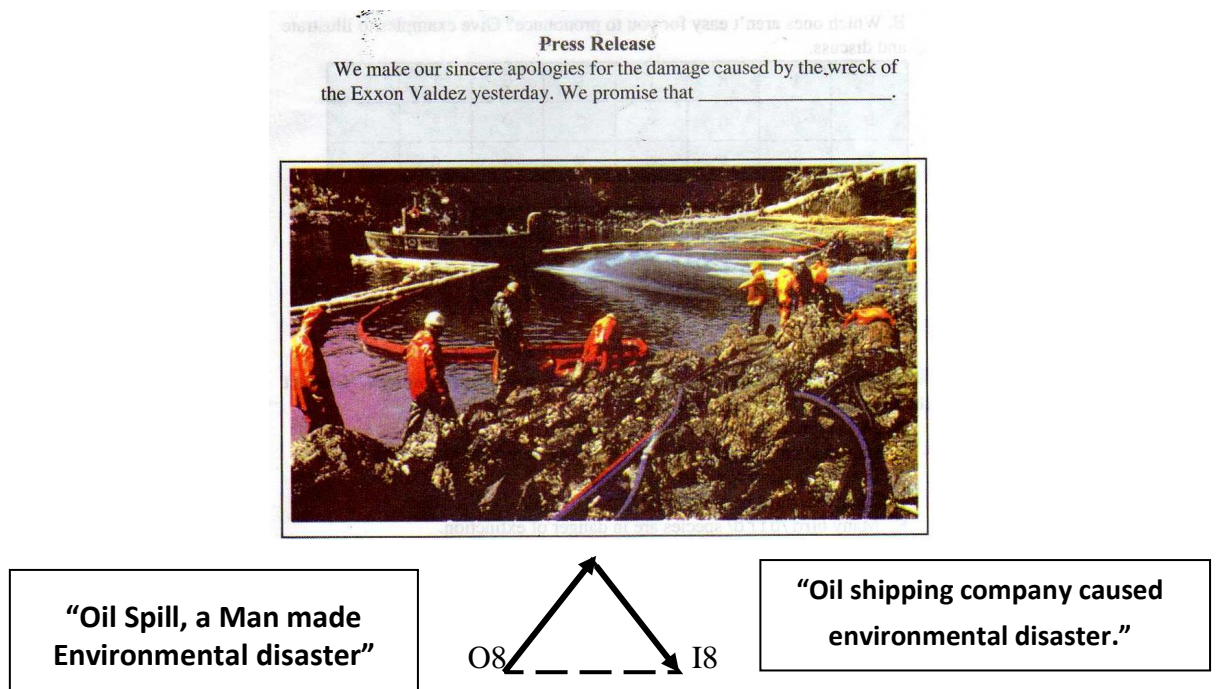
**Figure 77 The Communicational Sign-chain in Example 3**

At the end of the second learning sequence, students are now capable of answering the question "what happened to the Exxon Valdez Oil ship?" which isn't directly represented in the photograph, but is referred to in the task instruction above the picture. Students can only

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understand this after grasping the context of the photograph. First they learned the meaning of the word “shipwreck” then, learned about the consequences of the said “shipwreck” and witnessed in visual the Alaskan shore polluted with petroleum. in order to understand the **dynamic object** of this learning sequence and comprehend the written task instruction, they have to formulate **the final interpretant**, which Pietarinen calls **the effectual interpretant** because it comes on the outset of the conversation, and shows the effect of the final meaning of the educational sign-chain on the students’ performance of the next task.

**The Effectual Sign (whose interpretant is the student's final interpretant)**



**Figure 78 The effectual Interpretant in Example 3**

The goal of **the teacher's intentional sign /interpretant** is to represent the idea of “oil ship wreckage” and link it to the concept of “environmental disaster” but the communicational interpretant is a meta-sign which is the sign-chain of a semiosis process including a number of intermediary signs/ interetants. We can say that **the communicational interpretant** is a meta-semiotic construct, a process of semiosis which enables the meanings of signs to develop and be communicated effectively between the teacher and the student (s).

After learning about the events which are represented in the photograph and understanding the task instruction, students have acquired a better understanding of what they need to write about. They were asked to write a press release as the CEO of the Exxon Valdes Company to apologize for the damages and promise reparations caused by the accident. The objective of the comprehension and written tasks was to practice the functions. We can say that **the students' effectual interpretant to the teacher's communicational sign** is the meaning of the task instruction requirement. But the later is dependent on learners discovering **the final interpretant to the teacher's intentional sign** after a series of sign-chain developments.

**7-3- Application on Other Examples Five Examples of Learning Scenarios  
Used by Teachers**

In this example from another lesson script, the teacher does not introduce the meaning of the word “shipwreck” at the beginning, instead she relied solely on picture and the task instruction on page 63.

**B- The new word is learned as a symbol through icons and indices**

**Table 77 Example 01 learning the word a symbol through icons and indices [01-14]**

Lesson 1 Using the future passive for writing a press release
29. T1 Okay. What happened to the Exxon Valdez do you remember?
30. T1 Look at the photo. What happened?
31. S1 It was wrecked off the coast of Alaska,
32. T1 Yes! It was wrecked on the coast of Alaska. Do you know what does that mean?
33. Ss [SA]
34. T1 Look at the picture! Look at the image and tell me what happened and what is it caused by?
35. S2 Oil spilled up.
36. T1 Indeed, the ship was carrying oil pointing at the black matte displayed in the photo. Look, what happened to the beach?
37. S1 Polluted
38. T1 It was polluted. Just polluted? By what?
39. Ss Oil.
40. T1 Yes, then what happened to the Exxon Valdez first?
41. Ss Reading from the book “It wrecked in the sea”.
42. T1 Yes, the ship was destroyed and the oil got out and spilled on the beach.

In the example presented in table 5 above, the linguistic sign “the Exxon Valdez wrecked at the coasts of Alaska” was provided to students at the beginning of the lesson to ponder about it. The word “wrecked” was learned as a symbol whose object was unknown, using indices and icons. The goal of this teacher-student interaction segment was to interpret the utterance “the Exxon Valdez shipwrecked near the coasts of Alaska”, which was introduced very early in the plenary phase of the lesson. Students were told to open their textbooks and read the instruction and comment on the photograph. It was clear from the onset that the teacher-student interaction was mediated by students’ textbook instructions.

Students were given a few moments to discuss the photograph in pairs. This sequence involved flexible or inverted IRF (Initiation-Response-Feedback) interaction sequence. Basically, the teacher had prior expectations (assumptions that students might not understand

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the meaning of the word “wrecked” though it was part of the caption below the photo shown on the textbook page). The teacher asked the question to clear her doubt. The question in line 01 served two purposes one was to initiate the plenary phase of the lesson, and the second was to test the teacher’s initial hypothesis about a possible communicative difficulty concerning the referent of the expression “shipwreck”.) The goal was to explain to learners the meaning of the difficult word “wrecked”. In order to achieve that goal, the photo was used as an iconic sign of the meaning of the word “wrecked”. The picture represented the damages of a large oil spill on the beach, and a few workers wearing overalls who were trying to clean the contaminated zone. Nevertheless, it was the intention of the teacher to gradually bring her students to the photo and make the link to the meaning of the sign “wreck”.

The first step the teacher undertook was to ask students what happened to the “Exxon Valdez”. She prompted learners to infer meaning from the photo first, in line 2. Then she led the learners to match their interpretation of the picture with the concept to which the word ‘wreck’ referred. Accordingly, the word “wrecked” was the word that needed to be interpreted. It was a known sign without an interpretant. In order to infer the meaning of this sign, the learners were asked a few questions about the photo.

Students responded to the question in the first line by reading the textbook. But the teacher was not sure whether the learners understood what they were reading i.e. whether learners made the link between the picture which was the sign and its object which was the concept of oil spilling as a result of a shipwreck. So, she asked them explicitly if they really understood what they read in line 4 in table 5. The students kept silent, which the teacher interpreted as a sign of ‘incomprehension’

The hypothesis of the teacher was confirmed. She began a series of observations about the photo to lead learners from cause to effect, in order for them to understand what truly happened to the oil carrier ship. (lines 6 to 13) The photography was an iconic sign of an oil spill catastrophe provoking a feeling of disaster and ruin. The word can also be considered an index inasmuch as it connects the mind of the learners to the feeling of disaster incited by the picture itself. Prior to its spill on the beach, the oil was carried on board the Exxon Valdez ship. Yet, since it spilt out, some disaster must have happened. So, there was a strong indexical link between what happened to the ship and the oil spill. As a matter of fact, it is known that liquids can only spill out of a broken or damaged container. In order to draw this conclusion, the learners relied on their deductive skills. Thanks to the photograph’s iconic and indexical signs, the learners were able to understand what happened using their collateral experience even

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without understanding the symbol “wrecked” When the learners became aware of the chain of events leading to an oil spill disaster and acquired the information that English people use the expression “shipwreck” to refer to similar conditions, The students learned to link the linguistic structure to other objects of experience; they established the real interpretant of the question in line 1.

It can be said, therefore, that, when trying to understand how meaning is generated gradually through an elaborated process of interaction that includes both the students and the teacher, the two main variables to observe are the inference stages (the different cycles of abductive reasoning) as well as the learning scenarios involved in the segment (i.e. the different ways to present and interpret signs in interaction). In the tables below, more examples of a semiotic analysis of T/S classroom samples from all ten classes are provided and explained as means of illustrating the points discussed above.

**C- Known Object, given Sign, unknown Interpretant - Translation Method-**

The next example describes the other teacher’s approach to classroom interaction.

**Table 78 Example 02- Lesson script 01- lines [31-48]**

Lesson 1 Using the future passive for writing a press release
31. T ... Now after all the damage, caused by this shipwreck, it's the owner... The of the company decided to do what?
32. T Come on read it in the activity.
33. Ss " The owner of the company made a press release to apologize for all the damage caused by the oil." [
34. T So who made this press release, again?
35. Ss The shipping company! [OWA]
36. T Read again. It says here is that the owner of the shipping company made a press release.
37. Ss S1 what does it mean “owner of ‘sheeping’ company”?
38. T the owner, the man who built the company or the head of the company.
39. Ss S1 ‘sheeping’ Company? ‘dameksa’ ?
40. Ss [laughter].
41. T (comment? un berger)? ah you mean the ship? one ship! /fIp/ not the Sheep /fip/. c'est un bateau.

42. T So he decided to make a press release so what does the objective what is the aim of this press release?
43. Ss silence [SA]
44. T to apologize. What does that mean? He wants to say...
45. Ss Say sorry.[VP]
46. T to say sorry for what?
47. Ss S1 Madam! For a for... the catastrophe.
48. T That's right.

Most Algerian learners are multilinguals. By the time they reach secondary school in the Kabylie region, they already speak four languages. One or two first languages Tamazight with its local dialects, and colloquial Arabic. Many students master both Kabyle (one of the many spoken varieties of Tamazight) and colloquial Arabic (non-written form of Arabic).

Many students master a second language (classical Arabic) which they learn at school early on. In addition to a third language (French). The French language is classified as foreign language, and it is the third spoken language in the Kabylie region. Some children learn French alongside the Berber language (Kabyle) years before they study it in school. This is partly the reason why the translation method is still popular in many EFL classes despite being frowned upon by educational authorities.

Although, many teachers try to limit their use of translation in their classes, sometimes it is the only way to help a learner grasp the meaning of certain concepts. Often, teachers only have recourse to translation in a few places within a more elaborate inquiry process. One of Nôth's semiotic scenarios of learning new words is based on making parallels with signs from another language to learn a symbol as an argument in the context of a sentence. For instance the sentence "*The word 'owner' means "un propriétaire" in French.*"

Here, the word 'owner' whose object is familiar in other languages is provided to students as an unknown sign that needs to be interpreted in the context of the learning situation of the activity. Thus, the interpretant is unknown to learners, which causes them to be confused about what is expected them. The translation method is used here to clarify their confusion as the teacher provided translation of the word in French.

### D- Learning Scenario 02 Direct and translation methods for the learning of a ‘symbolic Legisign’ (07 04) [149-167]

**Table 79** Example 04 [149-167] Lesson script 07-

149. T Have you checked the meaning of “smog”?
150. Ss S2 Yes, Mrs. [OWA]
151. Ss S1 Smog is a dark.. huh ... a dark smoke... very dark smoke. [FSA]
152. T a-huh. (as a yes)
153. Ss S3 Yes Mrs, ‘une fume très noir.’[AnsL1]
154. T Smog is the association of two words...
155. Ss S1 What? [Ask]
156. T smoke and...
157. Ss S1 and Gas! [OWA]
158. Ss laugh
159. T No...
160. Ss S2 ‘tu y était presque’ [AnsL1] (Ss/Ss interaction.)
161. T Look at this! (Pointing at the window.) Can you see the mountain?
162. Ss No.[OWA]
163. Why not?
164. Ss ‘aghu’! S2- S4 le brouillard.[AnsL1] [OWA]
165. T yes! It’s the “Fog” c’est le brouillard en français. [AnsL1] [ESR]
166. Ss S1 so it’s a fusion between smoke and fog.[FSA]
167. T yes, it’s a fusion. That’s it. [ESR]

In this example, the teacher used the direct method of learning to teach learners to connect the familiar object (fog) with a new sign from the target language which is the word ‘fog’ (a Sinsign). In order to do that the teacher used guiding questions to elicit the word ‘fog’ from learners if they were familiar with it, but learners uttered the word ‘Brouillard’ in French, instead. The teacher had to use the translation method to provide the needed sign ‘fog’. In line 165 (T « Yes! It’s the ‘Fog’ c’est le brouillard en Français. »). In other words, what was learned in this interaction, was the habit of associating the familiar object with a new sign which replaces the word in French. A new interpretant is learned when learners refer to the fog they can see through the window with the sentence ‘The mountain is covered with fog.’

To lead learners to make the necessary associations' the teacher made a gesture to point to the window and the sentence in line 161 (T “Look at this! Can you see the mountain?”). The sentence contains the indexical Legisign ‘this’ to indicate the direction where students should look. And by pointing at the fog on the mountains she used a singular sinsign to cause learners to live a direct experience with the Object she wanted to teach.

When learners were familiarised with the interpretants of the words “smoke”, and “fog”, they learned that the association of these two words form a combined word ‘smog’. In line 166 the student S1 expressed his understanding (S1 “So, it’s a fusion between ‘smoke’ and ‘fog’.”) which informed the teacher that learners were finally able to interpret the word ‘smog’ in the paragraph as a symbolic Legisign without reference to its translation in their first and second languages.

### **D- Learning scenario 03 the word is learned as a ‘known object- known representamen’ to an unknown interpretant’**

Example 2 **Known object- known representamen and unknown interpretant’ [45-52]**

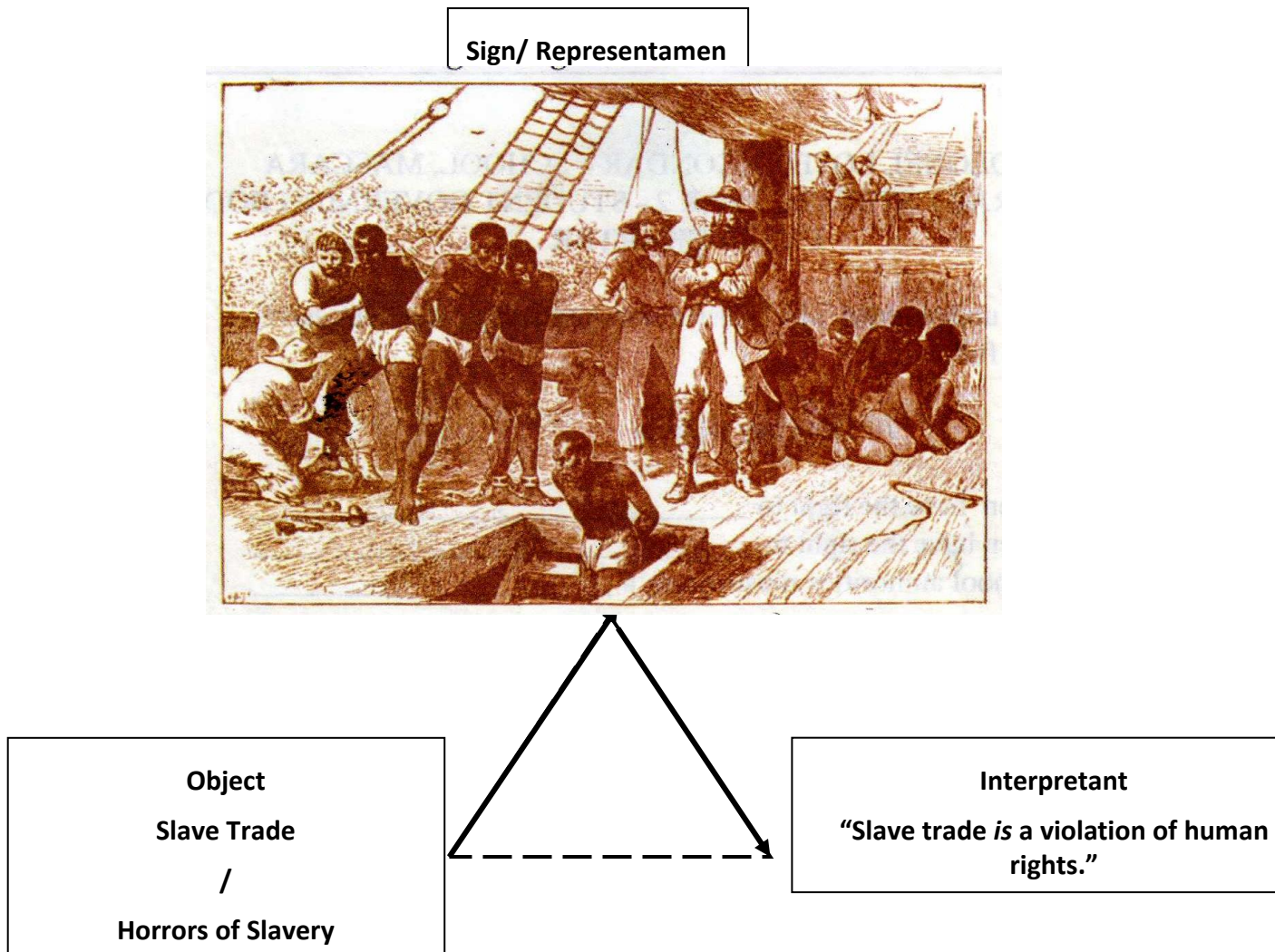
**Table 80** Lines [45-52] of lesson script 10

Example two [45-52] of lesson script 10
45. T The picture is, then, about the slave trade. The white man from Europe went to Africa, Ok? And brought black people first, to Asia then to the new world. (Drawing a simplified map in the form of triangle of the sailing road that slave ships used to take.)
46. T And they brought with them...?
47. Ss “Black people.” [IC]
48. T What did they use to buy from India, China...? (Pointing at the map.)
49. Ss [SA]
50. T Spices! They used to buy spices. What is the meaning of “spices”?
51. Ss S3 “Les épices.” [AnsL1]
52. T Yes, there were more types and good quality spices. This is called “trade” ‘تجارة.’ [L1] They, also, used to buy from other places a lot goods and products.

Students were able to translate the expression ‘Slave trade’ to Arabic. Yet they couldn’t explain what it consist of exactly. They also were familiar with the concept of slavery and how they are sold and bought as mere products. But they couldn’t explain how it happened or for what reason. They couldn’t form a meaningful interpretant. The concept of slave trade is discussed in two parts. First the word “trade” is explained at the end of a doubt/belief cycle about the road from America, to Africa to the east (India and china) where spices are bought. In a second discussion enslavement of black people from the African continent and their journey back to America aboard the slave ships is explained. The teacher guided students from what

they know to what they did not. At the end of the two interaction cycles learners construct the idea that what the map and the picture and the contextual information about ‘slave ships’ refer to is named ‘slave trade’ in English.

**Schmatisatopn of the semiosis process in the example 3-from lesson 10- topic slave trade.**



**Figure 79 Interpretation of the Iconic Sign - Example 3**

Here is an excerpt of T/S interaction example from lesson 10 will be analysed using Piaterainen and Peirce’s types of sign constituents in conversation. The sign user 1 will be the teacher and the sign user 2 is the learner or student.

**The Teachers’ Intentional Sign** At the onset of a conversation about “slave trade”, the teacher shows learners a picture from their textbook, to initiate a conversation about slavery and human rights.

**The intention** the goal of the task is to help learners express their opinion about slavery and compare the culture of slave trade with the culture of humans rights.

The teacher’s **intentional interpretant** is *Slave trade is a violation of human rights.*

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The teacher interprets the text book picture as representative of slave ships thanks to previous knowledge about the entire slavery era and the triad sailing itinerary from Europe to Africa to America which is known as the slave trade road, and its disastrous and long lasting consequences.

The teacher's **intentional object** is *The Horrors of slave trade*.

The picture represents a slave ship where slaves are sailing in inhuman conditions to another continent where they will be enslaved for life.

**The Interactional Communication Sign-Chain**

- Interactional sign 1

R1 Who are the people represented in the picture?

O1 Handcuffed black people and armed white men.

I1 The pictures shows enslaved African black people incarcerated by European enslavers/ slave traders.

- Interactional sign 2

R2 Where are these people?

O2 on a Slave ship

I2 the people in the picture appear to be on board of an old wooden ship.

(The initial and second interaction signs may be inferred from the picture.)

But the following reasoning can only be inferred from students' and the teacher's background knowledge/ collateral experience on the subject of the history of slavery. Thus the next rhematic signs, refer to the initial signs initial dynamical object.)

- Interactional sign 3

R3 Where are they going? / Where is the ship taking the black people?

O3 Slave trade sailing road, known as 'the slave trade triangle.'

I3 Slave ships depart from Europe; go to Africa where black people are taken forcibly, then directly to the coasts of the American continent, in the colonies plantations

- Interactional sign 4

R4 Why did the Europeans took black people by force? What are they going to do with them?)

O4 Trade them to wealthy plantation owners in the American colonies, who would enslave them and their offspring for life.

I4 The black prisoner will be traded to American colonists, for tobacco and cotton.

Interactional sign 5

**The Effectual Sign** Student's final intepretant is also the Effectual interpretant of the entire sign-chain, as it allows learners to grasp the meaning of the initial concept and thus, become able to perform the next task and relate what came before to what is next.

R5 Did they have the right to do that? And what is this operation called? (the communicational representamen)

O5 Slavery is an inhuman act of racism. (Dynamic object of initial sign)

I5 Slave trade is not ethical and it is against human rights. (final interpretant)

#### **7-4- Two- steps learning scenario for learning a new word**

##### **Example 3**

As explained in the review of the literature, learners learn three aspects of a word its form (the representamen), its referent or what the word is about, (the object) and its meaning (the interpretant). In some cases, none of these aspects are ever familiar to learners and, in others; the object is familiar to the learners, for instance the feeling of cold, joy... etc. Yet they ignore the form of the word that designates such an object in the English language. Some students may have encountered a word in English, without necessarily being aware that it refers to some familiar object to them, in this case, the interpretant is missing. The teacher's approach to teaching vocabulary may differ in each case. The following table summarizes the semiotic description of approaches to vocabulary learning that were identified in the data. Tables 5 and 6 illustrate two different approaches to learning the same word performed by two teachers with different learning priorities

The comparison between the two segments of the same lesson performed by two different teachers in two different classes showed an interesting contrast in the way information is presented and how its meaning is inferred. Although the teachers' use of abductive reasoning showed similar patterns, it resulted in adopting two different approaches to concept-building and meaning-making.

**Table 81 The Two Aspects the Learning Scenario Used in the Observed Data**

<b>Characteristics of the learning scenarios found in data analysis</b>		
<b>Aspects of the new word (sign)</b>	<b>The new word is learned as a symbol through icons and indices</b>	<b>Learning the word as the representamen of a familiar object.</b>
<b>Representamen</b>	Known provided in the context of activity instructions.	Unknown it was provided at the end of the T/S interaction.
<b>Object</b>	Unknown needed to be learnt using icons and indices.	Known it was part of the learners' collateral experience, but had to be pointed at through an iconic description.
<b>Interpretant</b>	Unknown The habit of associating the sign and the object was established once knowledge of the object was acquired.	Unknown The habit of associating the familiar object with its sign was established only after the sign had been provided.

The tables 5 and 6 illustrate two different approaches to learning the same word performed by two teachers with different learning priorities.

### **7-5-Two learning scenarios for a single learning goal**

It is possible to combine more than one learning scenario depending on the students' reactions response to activities and provide different types of signs to help learners construct their interpretation and reach a triangulation of meaning in order to acquire and apply new rules (habits of language use). In an attempt to illustrate the process whereby different kinds of meanings are generated and utilised in a two steps process to achieve a vocabulary building goal, we provide an example that illustrates the use of the two learning scenarios discussed previously, successively in one lesson. In the table below, a sample of T/S conversation from the lesson 04 is analysed in terms of the stages of inference and the learning scenario applied by the teacher to guide learners to the meaning of the word "irony".

**Table 82 Three-part analysis of T/S interaction semiosis**

Extract 04 from lesson script 04- lines [82-97]	Inference Stages	Interaction Cycles	Learning Scenarios
82- T “So how can you react to this cartoon?” 83- T “Do you think what you say and what she's doing are coherent or the same thing?”	<b>Teacher’s Assumption</b> Learners are able to comprehend the cartoon on the prints they were provided, but may not know how to describe it. <b>Guiding question 1</b> the teacher helps Ss formulate their description in English by pointing out the words in the carton bubbles.	<b>Initiation</b>	<p><b>Part one</b></p> <p><b>Interpreting an icon (the cartoon/ drawing) as the Representamen of a familiar Object (the concept of irony).</b></p> <ul style="list-style-type: none"> <li>- The caricature drawing is the Representamen of an ironic caricature.</li> <li>- The Object Irony/satire</li> <li>- Interpretant (it is ironic because, it visually displays two contradicting messages in a funny way.)</li> </ul> <p>The goal of this part is to lead learners to express the meaning of the icon in words (indexes and symbols)</p>
84- Ss “No! it's different.”	<b>Students’ response</b> showed that they understand that the cartoon is about but do not poses the words to describe it.	<b>Response</b>	
85- T “what do we call it when what you say and what you do is different?”	<b>Guiding question 2</b> The teacher tells Ss remember a word they may have encountered before in their first and second languages.	<b>Instruction</b>	
86- Ss[SA]	The silent answer from learners came as a surprising fact that challenged the teacher’s assumption.	<b>Response</b>	
87- T “There's a saying a proverb which goes like that ‘I say what I mean, and I mean what I say.’ But here it is inadequate.” 88- T “So do they do what they say?”	<b>Teacher’s Hypothesis</b> students are able to make the necessary link to the familiar concept but, they are unable to explain it using the target language. <b>Testing the hypothesis</b> the teacher provides the opposite proverb to help Ss formulate the sentence.	<b>Instruction</b>	
89- Ss “No!” 90- Ss S2 “The opposite.” 91- Ss S3 “Yeah they are eating food which is poor in nutrients.”	<b>Confirmation of the teacher’s second hypothesis</b> Students followed the teacher’s reasoning and observed that the cartoon displayed two opposite ideas.	<b>Response</b>	
93- T “So what do you think about this cartoon? Is it sad?”	<b>Teacher’s hypothesis</b> students are comfortable with using antonyms to recognize the right answers faster <b>Testing</b> The teacher asked for the exact word that describes.	<b>Feedback</b>	<p><b>Part two</b></p> <p><b>Interpretation of a symbol using the icon</b></p>
94- Ss “No! Funny!”	<b>Confirmation</b> Students provide the correct answer.	<b>Response</b>	

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<p>95- T “No, of course not! It is funny.”</p> <p>97- T “This is what you call “irony”. We say something but we mean something else.”</p>	<p>Positive feedback</p> <p>After the teacher ensures that all Ss understand the concept of irony she provides the word in English for the concept that is being discussed using the printouts.</p>	<b>Feedback</b>	<p>The meaning of the caricature becomes the Object of the sign “irony” which is a symbol.</p> <p>Interpretant is the definition of the concept of “irony”.</p>
		<b>Instruction</b>	<p>The goal is to learn that “irony” is the word to use to symbolise the concept of “irony” (which is represented by the caricature and a definition.)</p>

At the end of lesson four, Mrs B presented learners with prints which present a funny caricature. Her goal was to enable learners to describe the cartoon using their own language to make sure they grasped its meaning, and then to introduce the term “irony”. The example exhibits features of both the first and the second learning scenarios which were discussed previously. In the first part, the focus was on interpreting the caricature as the Representamen of a familiar Object. The Object (the concept of irony) is supposed to be known and previously experienced in the students’ culture (it was part of the learners’ collateral experience, but had to be pointed at through an iconic description.) While the Interpretant (of the icon) is unknown until it is discussed and agreed upon in class. In other words, the habit of associating the sign (i.e. the Representamen) with its (familiar) Object was established only after the sign had been provided and explained to the class.

In the second part of the interaction, the second scenario was applied learning a symbol through icons and indices. The teacher endeavoured to make the meaning of the word/ symbol “irony” known to learners using the information learned in part one. At first, both the Representamen (the word in English) and its Interpretant were unknown to learners. However, when using three different clues from the Object of the previous iconic sign, by having recourse to the students’ familiarity with that Object, and by providing a basis for interpretation (containing the sentence ‘It is funny.’ the teacher provides students with a clue to help them associate the meaning of irony with the context that is illustrated in the cartoon. Indeed, because the “index “it” and the adjective “funny” are now being related together, to form a meaningful sentence, learners learn to associate the Representamen (i.e. the word in English “irony” with the familiar “Object (the concept of ironic). Although the Representamen “irony” is given at the end, in the context of a simple definition, the Interpretant of the symbol (irony) became known to learners only after the Object of the symbol was acquired.

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As shown in the table, each step of the interaction procedure corresponds to a stage of reasoning. Globally, the interaction patterns in this example take the form of flexible IRFI cycles. The first I stands for Initiation (the initial question), while the last I stands for Instruction (additional information). Feedback, however, does not always come in positive statements. Following up with a question after a student's response indicates to learners that their answer is correct, this acts as positive feedback while pointing toward the Dynamic object. Even though all T/S interactions cannot be planned in advance, the teachers' ability to situate their own reactions in relation to their student's responses in the middle of a conversation helps to determine the next step.

**Conclusion:**

In this section, it is argued that the EFL learners were able to infer new words' meanings thanks to the elaboration of learning enquiry steps designed and reinforced by teachers. In this fifth section of the discussion, we argued for the application of a Peircean communication model to analyse the meaning generation process in classroom T/S interaction. The concept of triadic mode of learning (designing of interperants) which corresponds to the question "why?" is the most important part of learning as it entails the discovery of rules and laws that underline language use, we argue that learning is the ability to generate "interpretants" by negotiating the meaning of multimodal signs within an enquiry process. Beyond the inductive teaching process, we join the supporters of scientific enquiry in EFL classes whereby, all three inference modes can be used to formulate hypotheses, test them and learn how language rules apply in context thus facilitating the acquisition of the pragmatic competency for EFL learners. Furthermore, the semiotic analysis of the vocabulary learning process during the meaning-discovery stages has revealed that teachers apply different types of learning scenarios to guide learners' discovery of new meanings.

# General Conclusion

To conclude, the research objectives will be recollected, the findings of this research will be summarized, and conclusions based on the findings will be drawn. As the previous discussion chapter was divided into five sections, it requires to be summarized. Accordingly, a summary of the five discussion sections will be provided in the first part of the conclusion. Next, a section reflecting on the research process that has been undertaken is included. Importantly, the contribution of this case study results to the development of interaction studies in the Algerian EFL context will be clarified. Additionally, guidance will be offered on how this research work can be improved and recommendations for future research will be supplied.

### Structure of the Research Summary

The focus of the study, the research questions, and the working hypothesis were explained in the general introduction, while the background literature on EFL teaching and classroom discourse studies was reviewed in the first chapter. The second chapter described the methodological design of the mixed research. A quantitative analysis was conducted to account for recurrent patterns of conversations and interactions in EFL classes, and then an embedded qualitative mixed research was undertaken to explain the functions and structures of teacher/student interactions, as well as their role in meaningful language learning. Next, a conversation analysis (CA) was conducted for analysing patterns of teachers' and students' classroom discourse separately, while an interaction analysis (IA) was conducted to make sense of the interaction between teachers and English language learners (ELL).

Further, a thematic analysis of lesson procedures show how classroom learning experience is structured and how English as a foreign language (EFL) syllabus is approached in Algerian secondary education. After explaining the setting and the framework of EFL teaching, a thematic analysis of teachers' unstructured interviews conducted. The results of the interview analysis helped propose an interactional approach to classroom enquiry analysis. Teachers' strategies for engaging students in classroom interaction revealed coupled with a semiotic analysis of the whole interactive experience of learning English.

At the opening of the practical part, the third chapter detailed the corpus of the study, and then displayed the results of the quantitative analysis, and the results of the multiple qualitative analyses of the data. The following chapter, that is, the discussion chapter, is divided into five sections in which the results of the research were studied and conclusions were drawn. Now is time to present the summaries of the five sections of the discussion

The objective of the first section of the discussion was to describe the practical implementation of the EFL syllabus recommendations which promote the learner-centred approach. The quantitative word count analysis of classroom talk revealed less student talk and a higher rate of teachers' utterances in all ten lesson transcripts. As a characteristic of the teacher-fronted class, this observation led to questions about the way the CLT and CBLT teaching methods are applied by the teachers and about the impact of their views on the implementation of LCA approach. Even though teacher talk was slightly higher than students' talk, this does constitute conclusive evidence for teachers who still favour a traditional teacher-fronted method in their class over student-centred approaches.

The nature of teachers' utterances revealed the teachers' concern to develop the student's communicative skills, as most of the utterances produced by teachers in class consisted of questions and instructions. Integration with syllabus recommendations and teachers' responsibilities in a Learner-centred approach makes it clear that the actual application of these roles from the teacher's experience depends on, often, invisible factors, i.e. the teacher's attitudes and aptitudes which help shape and perform their roles in class. It can be said that the teachers' main focus was on providing opportunities for learners' participation and involvement in tasks and support their performance of activities (see Students talk patterns, in the first section of the discussion). We think that, although teacher talk dominated most lesson, it was invested in helping learners express their ideas and infer meaning on their own. Therefore, the quantitative analysis provides evidence that T/S interactions play an important part/role in EFL classes, and their frequent occurrence during the entire class time indicates that it probably has different purposes throughout the lessons.

On the one hand, the analysis of the objectives, functions and tasks in the secondary education EFL syllabus shows that the target competencies in the syllabus do not necessarily align with the learners' actual competencies and abilities. For example although the interaction is claimed important, the only tasks dedicated to developing it, explicitly, are in the listening and speaking rubrics. However, implicitly, interaction is encouraged through the pre-reading and pre-writing sections, where learners are expected to brainstorm ideas before checking and working on the four language skills (reading, listening, speaking and writing). During those brainstorming phases, student-student interaction is often put forward and emphasized. However, classroom observations revealed that learners' struggled to produce full sentences

and communicate meaningfully in the target language, a fact that renders student-student interactions ineffective in significantly enhancing learners' interactive and pragmatic competencies.

On the other hand, the analysis of teachers' opinions reveals a strong inclination toward applying discovery learning, encouraging interaction and perceiving that they have necessary roles to play in the EFL students' learning process. As they observe their learners' struggle to communicate effectively in class, teachers try to find solutions and devise personalized teaching strategies with their classes to be more effective in facilitating learning.

Although different efforts have been made towards explaining learning through the lenses of concepts such as communication and communicative competence in class through the implementation of CLT and CBLT, the concept of meaning in EFL classes is an important concept to redefine. Difficulties of communication facing learners and teachers at every lesson phase remain unsolved. These difficulties reflect a deeper issue in the way the English language is learned and used in the EFL class. The current approach to EFL teaching emphasises task performance and rehearsed communication i.e. (in the absence of significant information gaps) over problem-solving based learning. As a result, learning is not perceived as meaningful or motivating. This leads us to reconsider how meaningful learning is conceived and applied in secondary school EFL classes. It is important to rethink the EFL teaching and learning practices for two main reasons first to provide an actual representation of how meaning is generated in interaction and second, to understand how it is integrated by learners in the continuous process of learning new items.

It has been argued, that most teachers from the study agree on the importance of the learner-centred approach to EFL teaching. Despite the difficulties encountered in class, the main objective remains to empower learners and prepare them for a more autonomous learning experience in class. That is, help learners become aware of the strategies applied collectively in class, and the way their progress is affected. Without this kind of critical awareness, learning ceases to be meaningful to them. However, one does not become an autonomous learner without learning how to do so. Classroom experience and T/S interaction are key concepts in this process of learning how to learn. This very intention leads to revisiting the concept of

meaningful learning, and its relation to the dynamics of classroom interaction from the angle of discovery and problem-solving.

Despite being agreed upon by most teachers in the study, the Learner Centred Approach may not be applied in the same way by everyone. The research found that the learning process is most effective when teachers and learners engage in interactive inquiry processes with the view to solving problems of comprehension and meaning-making in class as learners experience them. In section 3, The analysis of the lesson phases where active T/S interaction is more prominent, has revealed that when T/S interaction is focused on specific aspects of learning according to contextual constraints, it results in strategies better communicate, and more effective vocabulary retention by learners. When Teachers use specific interaction patterns to guide learners' efforts in specific directions, learners' interest and concentration increase, thus providing teachers with more opportunities to probe learning difficulties, and design problem-solving strategies and discuss them with learners.

The analysis emphasises several interaction patterns, some of which are more flexible than others. One type of IRF sequence, is the one that goes backwards or the opposite of the classic or (fixed IRF sequence) instead of starting with the teacher initiating conversation, students may be the ones initiating the sequence by asking a question. In some cases, the student's incorrect answer to a question may be the catalyst for another interaction sequence. This backward sequencing of IRF steps indicates that an inference process is initiated as a form of retrospection about a problematic element of the lesson. When they engage in retrospective thought process the teacher and learners get out of ordinary inductive lesson procedures and engage in a problem-solving dialogue within a scientific enquiry framework. The T/S interaction patterns match the stages of the inquiry process as they mostly occur within the "answer checking lesson phase", and come as a response to comprehension difficulties.

To answer the question of how inductive teaching-learning principles are applied in EFL classes, it was hypothesised that different procedures are applied to render learning English grammar inductive for learners. The lesson procedures of the recorded grammar lessons have been analysed in light of the theoretical premises of inductive grammar teaching summarised by Thornbury (2003), which implies that the analytical method used is qualitative

The results were discussed in the second section of the discussion. They revealed that all six inductive lesson types were used by the teachers with noticeable variations. As discussed in

this section, the inductive teaching procedures feature several learning steps that are recurrent in all variations of inductive grammar lessons. Despite the diversity of these teaching methods, students did not perform well in tasks. Thus, teachers observed a few obstacles impeding the learning goals fixed for each lesson. Some students had difficulty understanding the tasks instructions; others could make sense of any language materials provided in the textbooks, while the most noticeable difficulty was the lack of student/student interaction ultimately, the analysis showed very few and ineffective peer interaction in the target language, while, their interactions in the native language were kept minimal.

This section explored the type of inductive teaching methods applied in the ten EFL classes to examine the nature of competencies and principles teachers find important in rendering EFL learning more meaningful, and thus, more effective for learners. To reach this aim, two sets of data were analysed qualitatively and were correlated to maximize understanding of the current application of LCA principles and teachers' attitudes toward inductive teaching practices. By comparing lesson plans with actual lesson procedures, it has been found that a thorough application of discovery instruction in EFL seems difficult and times consuming, and that most teachers find it difficult to implement student-student interaction-based discovery activities which characterise learner-centred learning, however. However, the study of teachers' attitudes showed that every effort is devoted to the application of more structured lesson procedures, which include inductive learning steps whose goals are in alignment with the syllabus requirements, and which are hoped to lead learners toward the gradual acquisition of the pragmatic competence in the target language. In addition to the benefit of structuring the learning process in orderly lesson phases, these inductive learning steps provide a space for T/S interaction, without which they have less chance of providing effective results.

The other argument which was expressed in this section is that teachers value the learning opportunities provided by inductive learning in the sense that they encourage meaning discovery as opposed to mechanical memorisation and thus they strive to apply inductive strategies as much as possible in class, by adapting their teaching strategies to their student's learning needs and providing them with sufficient practice in inductive learning practices.

The analysis of the inductive framework applied in class shows that several inductive learning steps reoccur in different lessons besides grammar lessons such as vocabulary, reading comprehension and writing lessons. Teachers consider the inductive teaching approach as a useful framework for developing learners' reasoning skills and enhancing their learning

autonomy. The finding of the second section of the discussion can be summarized in the following

1. Inductive lesson procedures facilitate autonomous learning in the EFL class as the CBLT technique.
2. Different Inductive lesson types were used and several common indicators show the inductive principles which are valued by teachers.
3. Teachers justify their choice of inductive principles and procedures by liking them to their roles and the curriculum objectives.
4. Teachers share their observations about the most challenging learning problems their students encounter in inductive EFL classes.

It is worth noting that despite the wide use of the inductive teaching framework to lead learners toward autonomy, classroom observations demonstrate that it is not yet the case. During students' group work teachers are often solicited for help on many stages of the task. The teacher clarifies the task instructions, and provides vocabulary or to explain the grammar rules. In other words, whenever students find difficulties performing learning tasks, they rely on the teacher's help instead of striving to find solutions of their own or work together in groups. This behaviour is due to ineffective student-student communication in the target language. These difficulties prevent learners from performing well in an inductive teaching environment. Thus, the need for more effective student-centred inquiry processes persists in Algerian EFL classes.

In order to achieve autonomous learning teachers design teaching strategies specific to the context of the problem and the resources of their students. The third section of the discussion provided answers as to what constitutes the most challenging activities for secondary education EFL students. One of the major difficulties that prevent meaningful full learning in class is the failure of peer interaction attempts during plenary phases, particularly Activity instruction and answer-checking phases.

During activity instructions, learners are presented with instructions on how to perform tasks, comprehension tasks in particular which require learners' understanding of the, and the language materials to reach conclusions about the meaning of words, texts and visual materials

as well. Most teachers try to make the language materials as accessible as possible to learners' level; however, most students find tremendous difficulties to grasp what is expected from them and to comprehend the materials in the target language. The inductive teaching frameworks instruct that learners discuss the tasks and activities in pairs or groups and help each other to find the answers before checking their understanding, while the teacher monitors the entire exchange. The teacher is asked not to get involved in this phase, in order not to obstruct the learners' inference through peer interaction. In practice, however, many teachers think that their students cannot carry on peer interaction successfully, and consequently require more help from teachers. The teachers assert that their primary goal is to help learners practice inductive inference during these learning phases, but often fail to reconcile the two end goals letting learners interact and infer knowledge together, and helping them overcome communication gaps. The issue of carrying on the entire syllabus is also part of the teachers' obligations and sometimes gets in the way of ensuring that learning stays meaningful for learners within time constraints.

The researcher examined the teaching procedures that take place within the classroom experience by discussing how interaction is used to encourage students' critical thinking and inference during those times when learners struggle with meaning-making. Indeed, it is argued that T/S interaction serves a bigger purpose than developing oral speaking skills. It is used for the development of critical skills and interaction skills. The interactive activities that students perform with the help of the teacher are analysed qualitatively to establish the function of T/S interaction during plenary lesson phases, namely to transform learning difficulties into learning opportunities by teaching strategies the focus is on the interaction strategies.

Section four of the discussion considered the use of T/S interaction as a problem-solving strategy to help learners overcome their learning difficulties in EFL classes. The inference processes involved in T/S interactions were presented as a dialogical technique to remediate the lack of collaboration between learners. Indeed, learners' inference of meaning is supported through teacher-guided inquiry. The latter has two main objectives a bring the communicational gap and overcome comprehension difficulties, and b- provide learners with a practical framework whereby, they could practice the use of critical thinking skills while working on developing their language skills. Section four also offered an analysis of the interaction patterns in different lesson stages, and argued that in the instruction and answer-checking phases, most IRF sequences are reversed. In these phases, learners initiate interaction

by providing answers and performing tasks, the teacher is on the receiving end as they evaluate learners' performance, to provide feedback and initiate remediation, when it is necessary.

In the last part of the discussion, we explained the theoretical premise of the semiotic analysis of meaning-making in class, and how both teachers and learners affect each others' interpretation of the signs they use in their conversations. The signs used by teachers are not always easy to understand for learners, T/S interactions are designed to guide learners' inference in the right direction toward finding the dynamic object represented by the educational signs designed by EFL teachers. It has been argued that for a sign to convey meaning effectively it needs to be a complete interpretant. In other words, meaningful signs need to be able to create an interpretant in the mind of learners to communicate meaning and therefore enable the learners to discover other meanings.

For learners, lesson objectives and theoretical concepts, as well as foreign language signs, are unattainable abstract entities, and it is for this reason that teachers provide learners with signs and engage in discussion with them through interactional signs that can be thought of as single communicative meta-signs in the context of meaningful discussions, where they assess learners' understanding and guide their attention to relevant cues regarding the subject of their enquiry (be it word meaning, grammatical rule or text comprehension... etc). The different ways the teacher presents the information and clues to guide learners' inference toward the correct answer constitute different procedures or learning scenarios, depending on the nature of the intentional sign.

These learning scenarios unfold in several steps that correspond to the exact learning needs of students. Through the first part of the section, we have explained that to learn the meaning of a new word in the target language, learners perceive it as an unknown sign and seek to know what it represents, by looking at three aspects of that sign. First, the spoken and written form of that word, which is its representamen, second, the thing it refers to in the real world, which is its object, and third, the knowledge/ the habit to relate these two (the sign to its object) in context, and that is the interpretant of the word. Once students acquire the interpretant of a new word, they have learned its meaning. We have argued that learners possess knowledge about indexical and iconic signs from their first and second languages, which they can exploit when learning a new language.

Winfried Nôth identified five ways to use these semiotic items already available as tools in the discovery process. In the Algerian EFL secondary education context, most learners and teachers often speak at least three languages (Berber, Arabic and French) therefore they possess

a rich vocabulary repertoire to choose from in terms of sign interpretation resources, this constitutes a notable advantage that should be used to its full potential when learning foreign languages. Three main learning scenarios are already being used in learning phases where word-meaning problems arise. Learning a word as a symbol from indices and icons and second is learning the word's sign from a known sign object. In the first scenario, teachers make use of visual or multi-modal language materials to draw learners' attention to the signs' properties that relate to the word in question, while in the second scenario, the focus is on the object of the sign, the teacher brings to mind the object of the word known to learners from another register then lead them to relate the new sign to the familiar object, thus bringing about a new interpretant in the students' mind. Both learning techniques rely on building new habits of thinking that logically relate foreign vocabulary to familiar meaning through building pragmatic competency. The third is a dual scenario which includes both manners of thinking about a sign and is used for complex concepts. Finally, the translation scenario can sometimes be used in addition to another to promote learners' use of their resources in vocabulary learning.

For an educational sign to be a sign, it needs to be subject to interpretation by a mind or group of minds. Based on this perception of the semiotic process, it appears that the educational sign, one is looking for, is rarely a single entity but a chain of interactional signs and their interpretants who tend toward the meaning in the context. The process of interaction that results in generating new meaning by engaging in an interactive enquiry process unfolds as a "chain of signs" through which meanings are negotiated and signs are developed into more meaningful signs (interpretants) whose role is to further the enquiry process until consensus on meaning is reached and the new meaning is confirmed. These sign chains that lead to learning or the learning generative semiotic processes are those which provoke a desire to discover the unknown without discouraging unsuccessful attempts at reaching the communicational goals set out at the beginning of a learning sequence. Thus, when teachers and students work together on discussing the meaning of educational signs, they constitute something close to a scientific community discussing language skills and pragmatic competencies. Each learning task presents an issue of signification, which can be either the meaning of a concept in the target language or a specific language skill to acquire. This issue or the initial task is meant as a way to provoke doubt in the mind of the learners about his/her previous knowledge and sets in motion an enquiry process to set that doubt, i.e. a learning sequence, in which learners are gradually led to solve the issue, settle doubt temporarily and acquire an additional ability to use

the target language pragmatically. A learning sequence can be as short as “understanding a task instruction”, “finding the meaning of a new word”, or as long as more complicated tasks such as “understand and applying a grammatical rule”, or “answering text comprehension questions orally”, “comprehending, performing a written task and producing a text (a meta-sign)” while the task and the context of the classroom inquiry are different depending on the learning goal set at the beginning. Yet the determinant factor is that when students fail to understand the signs teachers use to represent language knowledge, that constitutes a significant setback in the learning progress. Naturally, a communication deficiency is not a permanent setback, it is merely an opportunity for both teachers and students to address the comprehension difficulty, and learn crucial meanings for the facilitation of the rest of the learning journey. However, dealing with communication difficulties in class requires active listening on the part of the teacher. Learners did not always recognise their learning difficulties. It is up to the teacher to discover when a communication problem arises in the learners’ inference process, and turn his/her efforts to the language point/ sign whose meaning is lacking in the learners’ inference.

A semiotic analytical tool for classroom interaction analysis is needed to investigate the effects that the choice of educational signs have on learners’ meaning-making process. This in turn would provide the educator with enough information to guide learners through the process of discovery, by collaboratively and interactively dissecting signs and interpretants. Second, being aware of the semiosis and inference modes used in classroom discovery learning, offers interesting means to teach and practice critical thinking skills, and thus developing the pragmatic competency of learners.

Thinking of learning in semiotic terms in EFL education provides a flexible and holistic tool of classroom interaction analysis for researchers. The semiotic lense also enables educators to apply retrospective thinking methods which serve as an evaluation tool for their educational methods. Also, practicing critical thinking in the classroom within an enquiry procedure may improve teaching strategies and the learning experience of learners making it easier for them acquire a pragmatic competency in the EFL class.

### Significance and Contributions of the Study

The literature on EFL teaching and learning states that students learn and achieve best when they are allowed to invest their collateral experiences in discovery activities. To make EFL learning more learner-centred and to improve learners’ autonomy, the Algerian

educational system has undergone many educational reforms, since 2003. Consequently, the Competency-Based Approach to language teaching has been adopted within a general constructivist approach to learning, achieving a number of learning objectives. These objectives include raising learners' awareness about their crucial role in actively taking part in their learning process inside and outside of the classroom, and they also consist in providing students or learners with enough critical learning skills to acquire the necessary communicative and pragmatic competencies in English language use. Although much research has been undertaken to evaluate the efficiency of these changes in the actual learning experience, no consensus is yet reached as to the implementation of the learner-centred approach, nor the degree of its efficiency in increasing EFL learners' proficiency in English.

Throughout the current study, we have attempted to shed light on how the English language is taught to secondary school students under the guidance of the official syllabus. The main constraints faced by the teachers have been highlighted as well as the strategies used to address the practical shortcomings of this approach. The focus has been on the use of Teacher/Student interactions as on the strategic processes employed to render meaning-making in the target language more intelligible to students.

Looking at EFL learning through this learner-centred lens raises questions about how meaningful learning can be achieved in the EFL class and how is it practised by learners and teachers. Based on the significance and importance of classroom interaction in EFL teaching, the teacher/student interactions impact on learning progress should be considered as crucial peer interaction in the learning process. Developing the learners' ability to engage in critical thinking and meaningful enquiry requires the guidance of competent teachers who design and organize appropriate instructional strategies in a variety of problematic learning situations and use them effectively.

Many Algerian education specialists and scholars have expressed their concerns about the ability of EFL teachers and students to effectively apply the novel principles of CBLT, especially those principles that are more specific to a learner-centred approach to learning English. Several studies have undertaken the task of evaluating and monitoring the application of the CBLT approach to teaching different aspects of language at the secondary education level. Despite several difficulties reported in various areas of EFL teaching, in the last decade, three major remarks can be drawn from the study of literature. First, the CBLT approach has been officially in use in secondary education EFL programs, and many collaborative practices have been applied. Teaching methods such as group work and peer interaction are prioritized in

comparison to teacher-fronted classroom practices. More notice is given to classroom interaction and problem-solving tasks. Even though there is no shortage of studies concerning the challenges facing educators and the feasibility of CBLT in the Algerian context, the question of the efficiency of these methods in supporting meaningful learning, and improving the quality of EFL learning is still a matter of debate.

We now present a summary of the research and its major findings. As has been mentioned previously, the main purpose of this study was to explore the relationship between meaningful learning for the generation of new meanings through teacher/student interaction and teachers' manipulation of semiotic resources and processes in the service of the learning experience in the Algerian EFL class. Five objectives served as the focus of the study. The specific objectives of the study were

1. To describe the practical classroom implementation of the secondary education EFL syllabus recommendations which tend towards the learner-centred approach?
2. To identify the perceptions of EFL education teachers in secondary education regarding selected LCA principles and practices
3. To evaluate the effectiveness of selected teaching strategies (inductive teaching procedures and techniques),
4. To develop a model for the process of selecting appropriate teaching strategies and for the application of critical thinking during enquiry-based teaching.
5. To design a semiotic model for the description and implementation of meaning-making strategies that enable learners to generate new meanings through interaction in EFL classes.

#### Pedagogical Implications and Recommendations

The competency-Based Approach has become one of the most adopted teaching approaches in Algerian education, as it favours the shift from teacher-centred learning to student-centred learning in an attempt to develop the students' interactive competence. Indeed, the listening and speaking skills are given increasing importance in the EFL class. However,

the findings gathered throughout the study indicate that the implementation of CBA in the Algerian secondary school has not brought significant improvements in high school students' communicative and interactive competencies inside the classroom.

It is revealed in the study's final results that understanding the process and possible functions of T/S interactions is key to designing practical enquiry processes to evaluate learners' learning difficulties, and teach them how to infer their way to the learning objectives that matter for their learning process.

**Teacher/Student Interaction as Strategic Collaborative Process** The initial hypothesis was that high school teachers of English engage in efficient interaction with students not only to provide them with content information but also to monitor their understanding of instructions and provide help when needed by using an inquisitive dialogue as often as possible. The purposeful classroom interaction provides the language teacher with the necessary information about the learners' linguistic needs.

Each of the 10 sample lessons reflected the dynamics of thinking processes specific to each classroom context, content, the end goal, and students' background knowledge. The latter is a determinant factor in the choice of teaching strategies. Classroom interaction was part of a bigger communication scheme in which students' linguistic needs were evaluated and provided for. It is the process whereby the teacher becomes part of the learners' experience, thus, playing a mediating role in their knowledge acquisition process. To conclude, several implications can be drawn from this research

Competence acquisition in the EFL classroom is only possible through active sign interpretation. However, since the interpretation of signs differs from one context to another, a common ground must be established between interlocutors. The meanings of linguistic and non-linguistic signs are negotiated through interactive exchanges, to allow both learners and teachers to reach common ground knowledge on which to build concepts. While students build linguistic and conceptual repertoire, teachers also gain expertise with every interaction, adding to their collateral experience elements that may help them later in their thinking processes and future interactions with other students.

**Students' Spontaneous Contributions** Sometimes students may interrupt a lecture, or group work to ask a question, or provide an example of a rule discussed earlier in the lesson. Some students may as well use the board to write their thoughts when they are not comfortable speaking in front of the class. When a student initiates participation to ask about a previously

discussed point, that not only shows the student's interest in the subject, but also their awareness that their understanding of it may have been flawed. Such spontaneous student participation may prove essential to the appreciation of students' attention, and to monitoring their learning process. Students' remarks are necessary feedback for teachers to know where to provide explanations and when their attention is needed. Furthermore, teachers' positive feedback is essential to motivate learners' participation and increase their confidence to interact in class.

Use of L1 and L2 in EFL classes Teachers may evaluate learners' level of comprehension through interaction, and act accordingly. Occasionally, learners resort to their native languages to explain their points of view. As a spontaneous reaction, it should not be discouraged as it may display meaningful information about the students' learning progression and difficulties. The teacher's ability to switch to students' first or second languages should be regarded as a strategic advantage, which fulfils two main functions one, showing interest in students' participation to build trust without which learners may not feel safe to engage in conversation in the target language, in the first place and second, as a last resort to set in motion classroom enquiry. In the end, we conclude and suggest recommendations for further research.

Because of the subtle nature of the cognitive processes involved in meaning-making, and consequently, in learning, the exact mental practices in the learners' minds cannot be directly observed. Thus, the studies that deal with meaning-making are faced with the evident obstacle of subtlety. This study opted to examine the process of sign interpretation within classroom T/S interactions in the hope to capture the systematic teaching and learning strategies which support the generation of new meanings in the EFL class.

By adopting a systematic mixed research methodology for data collection and analysis, this study which inscribes more on the normative side of the research spectrum, we hoped to mitigate subjectivity and problems of reliability. The object of the researcher was to shed some light on the EFL learning practices that are meant to bring positive and effective transformation to EFL learners' level of mastery of the English language by raising awareness of the logical and semiotic aspects of meaning-making involved in interaction.

We propose looking at the educational process as a practice that gradually brings together the open world of firstness ( the hopes and motivation to learn a new language, and the will to help learners achieve their learning goal.), and the dimension of secondness, which is represented by the “the what and how” of education, namely teaching syllabi, lesson procedures and language materials...etc, with the domain of thirdness which encloses

educational research, recommendations of educational authorities and the best theories and practices in the combined fields of philosophy of education, the theories of meaning, applied linguistics and the semiotics of education, to understand the “why” of instruction, the reasons and resources of its improvement.

In the end, the research provides several recommendations for further research.

- Paying close attention to the dynamics of T/S interactions in language classes will help further our knowledge of human interaction and the development of the communicational/ interactional competence

- Applying a semiotic approach to understanding how signs make meaning develops a logical perspective on inference as a process of relating the concepts of learning and knowledge and to the acquisition of competence.

- Rethinking the concept of meaningful learning is central to improving the rates and quality of foreign language learning among secondary education students since it explains the acquisition and practice of all language competencies including the communicational interactional and pragmatic competence.

- Pragmatic competence depends on the acquisition and practice of critical thinking skills in class. The latter can only be acquired in practice with EFL teachers.

Finally, the inductive teaching procedures may be problematic for novice language learners in the absence of guided-enquiry systems that include the three logical modes of inference (abduction, induction and deduction). The researcher suggests broadening the notion of inductive learning to the more encompassing practice of discovery learning. This involves redirecting the focus of the EFL syllabus to problem-solving practices, rather than looking at grammar points and language functions from a perspective of mechanical memorisation. The goals of learning tasks that may suit discovery learning do not stop at the level of memorizing linguistic rules to apply in isolated sentences. However, they need to be incorporated in a larger or continuous process of meaningful dialogue. In order to engage the learners’ curiosity, language material may be designed in the form of stories or games, in which mystery plays a larger role, enticing learners’ to use their linguistic, pragmatic and critical thinking skills for a practical purpose, for example, making presentations, theatre plays, and producing useful fiction and non-fiction works.

For this type of inference based learning to occur, more freedom should be given to the teacher and students, who may at this point be considered a micro learning/scientific community. To lead and guide a learning community toward the acquisition of practical language and learning skills, in addition to producing language materials of their own, teachers need more in the choice of syllabus contents, materials, schedules, and more flexibility in planning procedures and learning schedules.

Also, the teachers' attention should turn to the trial and error processes of their students; those moments where learners make language mistakes or inference errors represent authentic learning situations where teachers and students discuss learning difficulties and opportunities. Discussions where solutions are actively sought, in T/S interaction is where logical inference and meaning negotiation happen. In the sense that, it is when processes break that they can be analysed and studied to discover the mechanisms underlying them. It is also, in these moments (of doubt) that learners curiosity and attention are most engaged, because of their awareness of the value and the importance of the activities in which they engage and the end results of their learning, which could have academic, artistic or practical value.

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## **Appendices**

## 1- Teachers' Unstructured Interviews

After-observation questions were asked for the five teachers at the end of each class. The goal was to inquire about their beliefs and attitudes about one or more aspects of the lesson they just performed as well as elicit explanations about their linguistic behavior in interaction

### 1- Interview with Mrs F

Classes	Interviewer's Questions	Interviewee's responses
Class 1	<p><b>Question 1</b></p> <p><b>Researcher</b> "Do you think the picture helped learners to understand the topic of the lesson?"</p>	<p><b>Mrs F</b> "Indeed, at least students were intrigued by the photo. It played a role in raising their curiosity, I think. The fact that made them willing to try answering questions about it."</p>
	<p><b>Question 2</b></p> <p><b>Researcher</b> "Before you let students work on the first task, you spent a lot of time explaining the activity instructions. Was there a particular reason?"</p>	<p><b>Mrs F</b> "I had to make sure learners understand the context of the activity first. The instructions contained a number of words that might be incomprehensible for all students. In heterogeneous classes like this one, not all students understand at the same pace. Therefore, my goal was to bring all learners at the same level of comprehension of the task. As you noticed a few students were struggling with few words and only asked about them when I insisted of their meaning."</p>

2- Interview with Mrs M

<b>Class 2</b>	<p><b>Question 3</b></p> <p><b>Researcher</b> “Why did you use the ink tubes to start the lesson?”</p>	<p><b>Mrs I</b> “Well, first, because it was the only thing available. But most importantly I wanted to simplify the task for pupils. By using something familiar and present in the immediate context of the classroom, learners feel more confident to answer the questions. Moreover the quantity of colour ink is suited to talk about quantities do not you think?”</p>
	<p><b>Question 4</b></p> <p><b>Researcher</b> “Why did you ask learners to describe the quantities in the tube before explaining the rule?”</p>	<p><b>Mrs I</b>” I prefer working with examples first. I invite learners to use their own words to describe what they see so that I can determine what they know and what they do not. After I attract their attention and hear their trials, I provide the correct words in English. Learners remember better when they try for themselves.”</p>
	<p><b>Question 5</b></p> <p><b>Researcher</b> “Why did you ask learners to give you the definition of the word ‘quantifier’ themselves?”</p>	<p><b>Mrs I</b> “Well it is always better to let learners talk about what they learned. Sometimes I ask them to summarise a point or describe a process or like today, I prefer ask them to define the concept we just studied to know if they were listening and be sure of what they understood.”</p>

3- Interview with Mrs N

Class 5	<p><b>Question10</b></p> <p><b>Researcher</b> “Why did not you start with the rule directly?”</p>	<p><b>Mrs N</b> “I prefer to let students thinks for themselves and infer the rule from the examples we discussed, alone if possible, or with my help. But, even if they give a wrong answer it is preferable to let them try before providing them with the exact rule.”</p>
	<p><b>Question11</b></p> <p><b>Researcher</b> “May I ask why did you use your student question as an example?”</p>	<p><b>Mrs N</b> “Even if student’s questions are seemingly out of topic, sometimes they turn out to be quite useful. By integrating the student question into the lesson I achieve two main goals, first I took profit of the accessibility of the language. The example is simple enough to be understood by the whole class, which facilitates understanding the rule as well. And second I turn students’ attention back to the lesson topic, thus preventing too much waste of time.”</p>
Class 6	<p><b>Question12</b></p> <p><b>Researcher</b> “Why did you give them the activity home instead of working in class?”</p>	<p><b>Mrs N</b> “Not only I gave them the exercise as a home work but, I, also, specified that it is important to try on their own. The activity is simple but rather long. I thought it best to allot more time to discussing student’s answers. This way we gain valuable time to check learners’ difficulties and provide support only where it is needed. The goal of the activity was to help them write a full charter of rights and duties. This wasn’t the first time they encounter the model verbs that express obligation and prohibition so, all I did was providing them with the opportunity to practice. To tell you the truth I was happily surprised to see that they did quite good job.”</p>

**4- Interviews with Mrs B**

	<p><b>Question 8</b></p> <p><b>Researcher</b> “Why did you use the cartoon in the hand-outs? How do you think the use of pictures such as these help students?”</p>	<p><b>Mrs B</b> “The cartoon is a funny way to help student get awareness of a serious problem. Sometimes one picture can talk louder than a thousand words right? By observing the clearly identifiable picture learners can easily infer the consequences of bad eating habits and thus contributing to the discussion.”</p>
<p><b>Class 4</b></p>	<p><b>Question9</b></p> <p><b>Researcher</b> “Why did not you use the cartoon from the beginning?”</p>	<p><b>Mrs B</b> “I could have used it to beginning; it could have been another way to conduct the lesson. But, I chose to consolidate the points of the previous lesson. We’ve discussed how to express habits in the past using the past simple and structure “used to”. Asking them to describe the eating habits of their ancestors is a way to make them practice their previous knowledge. Moreover, when we start by what learners know it is easier to get them to talk.”</p>
<p><b>Class 10</b></p>	<p><b>Question 20</b></p> <p><b>Researcher</b> “I noticed you repeat questions more than once, or ultimately replace question by others until you receive a satisfying answer for learners, could you explain what is your aim in doing so?”</p>	<p><b>Mrs B</b> “That is because I have to lead learners to think, to gather their courage and try answering the questions addressed to them. Learning requires trial and error and it is the only way to engage students in their studies. It is my job as a teacher to ensure they act in this direction. Sometimes it is difficult to lead reluctant students to talk but with perseverance I often get positive results.”</p>

	<p><b>Question 21</b></p> <p><b>Researcher</b> “Why do you often ask learners about the meaning of the words they utter themselves?”</p>	<p><b>Mrs B</b> (smiles) “Believe it or not, sometime, learners use words they do not fully understand, or they confuse words with other words. For example, they confuse “cold war” with “civil war”. Or “species” with “spices” and so on. It is important to always check if what they say corresponds to what they want to say. I, also, find it useful to refer to the textbook pictures to remove confusion.”</p>
	<p><b>Question 22</b></p> <p><b>Researcher</b> “Why did you give them that homework at the end?”</p>	<p><b>Mrs B</b> “I intend to make them write a speech or an article about the same topic. Therefore it is important to be familiar with this kind of written production. Next time we will discuss the ideas and structure of the textbook article using their understanding of today’s concepts and ideas.”</p>
	<p><b>Question 23</b></p> <p><b>Researcher</b> “Why do you ask them some questions about the meaning of the picture?”</p>	<p><b>Mrs B</b> “First of all I encourage them to express themselves in English as often as possible. Also, I hope to engage their memory to find the English word for each element in the picture. Most of the time they are simple words that learners have certainly encountered in the past. If not, part of my job is to provide them with extensive vocabulary which is necessary to develop their ability to describe.”</p>

5- Interviews with Mrs H

Class 3	<p><b>Question 6</b></p> <p><b>Researcher</b> “You started the lesson by explaining the word “wreck” before you refer to the textbook, why?”</p>	<p><b>Mrs H</b> “Yes, I wanted to be sure that students know exactly what we are talking about before we start the lesson. It is better to let them be aware of the topic of the lesson beforehand. This compels them to pay attention to what comes next.”</p>
	<p><b>Question 7</b></p> <p><b>Researcher</b> “I noticed that you frequently ask learners about the meaning of words spoken in class, may I know why?”</p>	<p><b>Mrs H</b> “As I said I’d rather have learners be aware of the meaning of the words they use. It is easy for them to lose track of the discussion. Moreover it is a technique to bring their attention back to the lesson.”</p>
Class 7	<p><b>Question 13</b></p> <p><b>Researcher</b> “Why did you choose this text?”</p>	<p><b>Mrs H</b> “It is short and accessible for student. Even though the textbook texts are well designed they are often too long and way beyond the real level of students. Sometimes I substitute them with shorter texts to suite learners needs.”</p>
	<p><b>Question 14</b></p> <p><b>Researcher</b> “Why did you give them the text to read at home?”</p>	<p><b>Mrs H</b> “I asked learners to read the text at home to get familiar with its ideas and to spend as much time as they need to look for the difficult words and for a preliminary understating of the topic. Basically, all I did was giving them the opportunity to work on the text at their own pace before we collectively discuss it in the much restricted class time.”</p>

<b>Class 8</b>	<p><b>Question 15</b></p> <p><b>Researcher</b> “This is not the first time you tackle this subject. Why did you decide to dedicate another session to this lesson?”</p>	<p><b>Ms H</b> “Yes, I briefly introduced the functions of “wishing” and “regretting yesterday. But that wasn’t sufficient. Learners needed additional time to practice. The other reason is that there were a great number of absentees last time because of the snow, so it was beneficial for all the class.”</p>
	<p><b>Question 16</b></p> <p><b>Researcher</b> “I find it very original to give a grammatical concept the name of a dance move. May I ask for the reason of this choice?”</p>	<p><b>Mrs H</b> “Indeed it might seem a little bit farfetched but, it actually works for the simple reason that learners remember words (especially vague theoretical concepts) better when they are associated with things that are interesting to them. And Michael Jackson’s famous dance move was both familiar and interesting to them. Moreover, they do not always have the opportunity to see a teacher perform a dance move in class, do they?”</p>
	<p><b>Question 17</b></p> <p><b>Researcher</b> “It is unusual for a teacher to be so funny. Do you consider humour as a teaching technique?”</p>	<p><b>Mrs H</b> “Everyone needs a dose of laughter and humour, especially students. Sometimes when I notice that learners start to get bored or tired I do not hesitate to lighten up the atmosphere a little. One small joke can restore students’ energy almost instantly. In addition students remember vividly what made them laugh. It is easier to retain information we joke about. Therefore, I make sure to provide important points during these moments.”</p>
	<p><b>Question 18</b></p> <p><b>Researcher</b> “Were you surprised to hear the student who was apparently not paying</p>	<p><b>Mrs H</b> “Yes! I was agreeably surprised to hear him produce a correct sentence related to the topic. His intervention indicated that he understood why and how to express wishing. It was also a good</p>

	<p>attention, provide a good example about the point you were explaining?”</p>	<p>opportunity to provide further explanations and check the other students understanding.”</p>
<p><b>Class 9</b></p>	<p><b>Question 19</b> <b>Researcher</b> “Why did you talk about the students’ difficulty to remember and use the passive voice?”</p>	<p><b>Mrs H</b> “I wanted to explain the importance of practice in learning the passive voice. Often, learners dread this specific topic and perform poorly in exams mostly because of the idea that the passive voice is too complicated and too difficult to learn. My goal was to break this conviction and replace it with simple steps to render the most complex process easy as game.”</p>

## 2- Recorded lesson Transcripts

### Appendix 02 Recorded lesson Transcripts

#### 1.1. Lesson script 01 Lesson 1 Oil Spill Catastrophe Second year- Literature and Philosophy - Teacher 1 (Ms F)

1. T Okay. What happened to the Exxon Valdez do you remember?
2. T Look at the photo. What happened?
3. Ss S1 It was wrecked off the coast of Alaska. [FSA]
4. T Yes! It was wrecked on the coast of Alaska.
5. T Do you know what does that mean?
6. Ss [SA]
7. T Look at the picture! Look at the image and tell me what happened and what is it caused by?
8. Ss S 2 ----- oil spil-l-ed up. [OWA]
9. T Indeed, The ship was carrying oil pointing at the black matte displayed in the photo. look What happened to the beach?
10. Ss S2 Polluted [OWA]
11. T It was polluted. Just polluted? by what?
12. S2 Oil. [OWA]
13. T What happened to the Exxon Valdeaz first?
14. Ss Students reading from the book “It wrecked in the sea”. [FSA]
15. T Yes, the ship was destroyed and the oil got out and spilled on the water.
16. T Look at the damages of oil spill, What happened to the hotels and restaurants?
17. Ss They were ... [Incomplete sentence] [IncS]
18. T they were what?
19. Ss S3 Closed [OWA]
20. T Now look again to the picture and tell me what you think happened to the fish?
21. Ss S1 Suffocated. [OWA]
22. Ss S2 Asphyxiated. [OWA]
23. T So then we can say that fish died, because they suffocated because of lack of oxygen.
24. T Okay let's recapitulate. After the Exxon Valdez capostrophe there was some damages.
25. T So what happened?
26. Ss The water is polluted. [FSA]
27. T The water “was” polluted.
28. Ss The beach was destroyed. [FSA]
29. T Yes! Everything on the beach was polluted. Did the fish survive?
30. Ss No! Died. [OWA]
31. T In the first sentence. Fish was poisoned. And it suffocated. There was no oxygen. Now after all the damage, this ship coast, it's the owner of the company decided to send it to do what?
32. T Come on read it in the activity.
33. Ss " The owner of the company made a press release to apologize for for all the damage caused by the oil." [FSA]
34. T So who made this press release, again?
35. Ss The shipping company! [OWA]
36. T Read again. It says here is that the owner of the shipping company.
37. Ss S1 what does it mean owner of ‘sheeping’ company?
38. T the owner, the man who built the company or the head of the company.

39. Ss sheepping Company? dameksa ?
40. Ss hhh.
41. T (comment? un berger)? ah you mean the ship? one ship! /fIp/ not the Sheep /fip/. c'est un bateau.
42. T So he decided to make a press release so what does the objective what is the aim of this press release?
43. Ss silence [SA]
44. T to apologize. What does that mean? He wants to say...
45. Ss Say sorry.[OWA]
46. T to say sorry for what?
47. Ss S1 Madam for a for the catastrophe.
48. T that's right.
49. T Now, we have to try to write this press release. We have to imagine what he said. By using these ideas.
50. T How many ideas are there ?
51. Ss Seven. [OWA]
52. T use the 'keys' or notes we have to write them in what form?
53. Ss The passive form [OWA]
54. T Yes in the in the passive form but also in the future. so in the future passive.
55. T Someone to read the question of exercise again, please.
56. Ss S3 One male student read the question again.
57. T but do you know how to form the future passive?
58. Ss A few Ss node yes. [GA]
59. T Really! How?
60. T Do you know how to form the future passive?
61. Ss[SA]
62. 62. T So for the future active you know how to form it? "Will" plus the stem of the verb. yes...? What about the future passive? Ss Will plus the participle of the verb.[FSA]
63. T 2000 worker's - recruit - soon.
64. Ss 20000 workers will recruited soon.
65. Ss S4 Will **be recruited** soon. [PeerCor]
66. T that's right! Second sentence look at it. Oil -Recuperate -special - Machine.
67. Ss S5 The oil will be recuperated by Special machine.
68. Ss S6 Marine life will be restore
69. T Restore or restored?
70. Ss S6 Will be restored. [SelfCor]
71. T Now then let's write this press release. Who can try?
72. Ss A female student We promise |p r u m a i z| that..., beaches will be cleaned and the oil be recuperated by special machines. (wrong spelling) [FSA]
73. T We promise that...Yes, we say /p r D m i s/
74. Ss Female student |b r i d s| will be washed out. (wrong spelling) [FSA]
75. T Excuse me what did you say? the what?
76. Ss Another student 'The birds', 'the birds' not the |b r i d s|! [OWA]
77. T Good now who can read us the whole press release.
78. Ss A student started reading in a low voice.
79. T if you were the owner of the shipping company, you would be speaking to a lot of people, so you have to raise your voice.

## 2.1. Lesson script 02 Adverbs of Quantity

### Level 1st year- scientific stream- Teacher 3 (Ms I)

1. T If I want to describe the quantities of ink. “L’ancre, celas’écrit ; I N K” (she spells the word using the French alphabet’) [AnsL1]
2. T If I want to describe the quantities of ink in my red pen and my black pen, what should I say?
3. T Look at the difference, (she shows the whiteboard pens she holds in her hands) « est ce que vous voyez a peu-près? »[AnsL1]
4. Ss Yes! [OWA]
5. T There is a difference between them. Let’s compare between the black pen and the red pen. How would I describe the quantity of red ink my red pen?
6. Ss [SA]
7. T I would say there is...
8. S1 small quantity. [NP]
9. S2 a bit of red. [NP]
10. T a bit? Or... look here, this is the one hundred per cent 100% (showing the ink container ) lorsque la cartouche est pleine. Est ce niveau par rapport a ce 100% (showing the red pen’s ink container) il est comment ?
11. S3 Twenty. [OWA]
12. T 20 ? or ten ? ok let’s say ten then. Ok then how do we describe this quantity?
13. S1 a little![OWA]
14. T yes! A little, good. Ok what about this one?
15. S4 so much of! [OWA]
16. T what did you say?
17. Ss so much of. (The student repeats) [OWA]
18. T so much of? Mmm... look at it, (she shows a tube half-ful) its fifty % (c’est Presque le cinquante %).
19. I would say there is.... ?
20. Ss half.[OWA]
21. T voila!!! There is half. For every quantity I want to describe there is a specific adverb used for it here called this quantity a little this is a half. For under or more than a half it depends, for every quantity which adverb to use. And look at the percentages
22. T (regardez les pourcentages qui sont mentionnés dans le tableau.) It’s true that there is a lot of water ton earth, however ..... (Exercise in textbook)
23. Ss some! (not sure of the answer)[OWA]
24. T on est à combien ici dans la sale ? on est a trente huit ? if I say the majority of the pupils here are girls, and not boys. Comment je vais dire ‘The majority’?
25. Ss la plupart! [AnsL1]
26. T la plupart, oui! Then which adverb describes the majority? [AnsL2]
27. Ss the most. [OWA]
28. T the most! Very good!! [PosRt] (Positive Reinforcement )
29. T.... and... (The teacher carries on with the exercise reading the sentences and leaving the

- gaps! She explains alone the way and letting students answer on their own.)
30. Ss some[OWA]
  31. T but soon, there will be .....
  32. Ss never...[OWA]
  33. T Non, 'never' "c'est un adverb" of frequency, we are not talking about time here. So what should we say here?
  34. Ss ... [SA]
  35. T Here we say none (plus rein). 'But, soon, there will be none left for drinking'.
  36. T you see? So for every quantity we have given precise and specific adverb for it. Now, then! What is the title of the lesson?
  37. Ss adverbs of quality![NP] (Noun Phrase)
  38. T of quality? Are you sure?
  39. Ss no, quantity! [OWA]
  40. T We call them adverbs of quantity but, we also call them quantifiers! (The teacher writes the title on the board, while she explains).
  41. T Now, I am going to ask you to give me a definition of these quantifies, what is a quantifier? When do we use them and what do we use them for?
  42. T Quelle est la fonction d'un adverbe de quantité dans une phrase ?
  43. T Yes? What is a quantifier?
  44. Ss ...[SA]
  45. T no one?
  46. Ss S2 it's a word that express how much of ...[IncAns]
  47. T very simply, we can say a quantifier is an adverb that describes a quantity. Or an amount or the number of a group of people or another aspect.
  48. T Now there are some adverbs which are used with accountable nouns others are which can only be used with uncountable nouns and other which can be used with both!
  49. T Do you know what we mean by accountable and uncountable nouns?What is a countable noun?
  50. Ss [SA]
  51. T Countable nouns are...? "Countable", 'ça viens de quell verb?' it comes from the verb? to...?
  52. Ss S3 Compter. [AnsL1]
  53. T what do we have in COUNTable? (stresses the first syllable, insists on getting the word in English.)
  54. Ss to count!
  55. T Ok then a countable noun is a noun that I can count! For examples, give me examples of things you can count? (Anything you can count...)
  56. Ss S2 fingers, [OWA]
  57. Ss S1 candies, [OWA]
  58. Ss S3 pens, [OWA]
  59. Ss S1 people...cars, animals, books...; [OWA]
  60. T ... Etc. All these, are things we can count! Ok that's right! Now, the opposite of countable nouns, what are the things we cannot count?
  61. T Now opposite to countable nouns, we have uncountable nouns, which mean, nouns that

I cannot count or things I cannot count by giving them a number. Je ne peux pas compter par exemple quoi....?

62. Ss S3 hair! [OWA]
63. T The number of your hair! Yes! Hair is an uncountable noun... (waiting for more answers)
64. Ss S3 water, [OWA]
65. T yes water, juice, sugar, money.... Is money a countable or an uncountable noun?
66. Ss S2 countable ! [OWA]
67. T really? Can I say one money, two money, three money?
68. Ss No! [OWA]
69. T No, we can't! Consequentially, money is a noun which is not countable! it is an uncountable noun. Ce que je peux compter dans l'argent c'est les pièces et les billets. I can count "coins" les pièces d'argent ça s'appelle « coins ». (The teacher writes the word on the board). Alors, vousavez compris ? [AnsL1]
70. Ss Yes![OWA]
71. T Donc nous allons voir.
72. T Quels Adverbe de quantité fonctionne avec les choses que je peux compter et le quels fonctionnent avec des choses que je ne peux pas compter, et qui peut fonctionner avec les choses que je peux compter ?Est ce qu'il ya un adverbe qui peut fonctionner avec les deux ? [AnsL1]
73. T Ici (pointing at the exercise still on the board) we started from 0 to 100 %. For example, "None" can be used with both. Also any
74. T Je vais vous dire la différence entre les deux. Il ya une différence. D'accord? [AnsL1] For example « A little » avec quoi devrions nous utiliser « a little » ? avec countable ou uncountable ?
75. Ss [SA]
76. T In the paragraph, 'dans le paragraph le mot c'est"water" we used "a little".What about countablenouns ? 'quel est l'adverbe qui décrit la même quantité mais qui marche avec ces mots la ?'
77. Ss [SA]
78. T ...Undersome. We say "undersome"...Very little. 'Quelle est la différence ? est ce qu'on parle du même pourcentage ?'
79. T Can I say a lot of water to drink?
80. Ss yes! [OWA]
81. T Yes? Ok! Now with 80%. 'Many' do we use many with countable or uncountable nouns?
82. Ss [SA]
83. T Can we say many pupils? Or many water? (refashions the question)
84. Ss No! Many pupils! [NP]
85. T so we use it with countable nouns! But there is another word for the same quantity. 'Quell est l'autre mot qu'on utilize? (The teacher repeats the same sentence twice while waiting for student's response.)
86. Ss ...[SA]
87. T it starts with M... (pause); and ends in H.

88. Ss Much! [OWA]

89. T Exact! Donc voilà la classification. Now how do we ask about any quantity?

90. Ss S1 How much! [OWA]

91. T Now if I want to know the number of people we have in the classroom. “Si je veux demander combien sommes-nous dans cette sale? Il y’a deux façons de le faire.”  
[AnsL1]

92. Ss S1 How much people are in the classroom! [FSA]

93. T Yes... or “how many people are there?” ok?

(Bell ringing )

3.1. Lesson script 03 **Lesson 3 oil spill catastrophe****Second year Year Book 2- "Getting Through" Literature and Philosophy Teacher 2 (Ms H)**

1. T Good morning! Hurry up!
2. T Anything to correct yes or no?
3. Ss No! [OWA]
4. T Have we finished with the texts?
5. Ss S1 We haven't started with the second text! [FSA]
6. T We leave the second text for another time.
7. T Today we're going to deal with something else.
8. T When two cars collide, what do we have?
9. Ss S1 A collision. [OWA]
10. Ss S2 An accident. [OWA]
11. T Yes! "An accident" or "collision" (She writes the words on the board.) [ESP]
12. T Now, when you have the same accident in the air this time. When to when two planes have an accident, what do we call it?
13. SS S2 A crash. [OWA]  
(The teachers write it on the board.)
14. T And what if it happens in waters in the sea?
15. What do you call an accident between two ships? ... a crash?
16. S3 "Un naufrage". [AnsL1]
17. T1 Ok! We just called an accident in the sky a crash, but when it happens in the sea is called a "wreck" or "wreckage".
18. All right then, when an accident happens in the sea or the ocean, it is called wreckage. So for today we're going to deal with the Exxon Valdez wreckage in the sea. I made some research concerning this accident this wreckage.
19. Ss The first was the Titanic, Mrs? [FSA] [Ask]
20. T Yes, one of them. But the event of the Titanic is something else? See, here, what we are talking about, is "pollution". Look at the title of the unit "Want not, Waste not". The Titanic has nothing to do with pollution, right? [Rhetorical question]
21. Ss yes! [OWA]
22. T The only thing that happened then was that all these poor people that died and became the food of sharks and other big fish. There was not something that pollutes the ocean on a big scale. [ML]
23. T However, the case of the Exxon Valdez ship, we different as it was carrying something very pollutant what is called Oil.
24. T So what is oil? By the way?
25. Ss [SA]
26. T It is not olive oil okay?
27. T We sometimes call it...?
28. Ss Petrol? [OWA]
29. T Yes, In America they call it that way. They call it "Patrol".
30. T But in British English it is called "Oil". This "Oil spilled Out from the boat. Where did it

go?

31. Ss The sea! [IC]
32. T It went to the Sea. [ESP]
33. T What happened after the Oil spilled out everywhere in the sea?
34. Ss S2 "Polluted the sea." [IC]
35. T What are the other consequences of this spill up?
36. Ss Death of fish. [IC]
37. T Death of the fish, yes! What else? [ESP] [PR]
38. Ss [SA]
39. T It is not so difficult to take out is it? Or to clean it up. Is it difficult to clean?
40. Ss Yes, difficult. [IC]
41. T Why do you think it is difficult to clean up?
42. Ss [SA]
43. T Because it is a...? How is oil?
44. Ss [SA]
45. T It is a liquid is which floats on water and it covers Waters. When a lot of it is spilled out on the sea, It covers everything. A big area of waters with this liquid which is an "oily liquid".
46. T So, after what I said, was it easy to clean all these waters or beaches touched by the spilled out oil?
47. Ss No!
48. T Well, yes! It was not easy to clean slippery oily on the water and beaches in Alaska. [PR]
49. T So now I'm going to give you a series of notes concerning this event. You'll be asked to turn the verbs into the passive form. Is that's all right?
50. Ss Yes. [OWA]
51. T Ok! Please, before you do take down what's on the board, if you have your books you can open them on page 62. We are in the Activity one.
52. T "The ship was carrying a huge cargo of oil. What does it mean huge?"
53. Ss Big! [OWA]
54. T A very important cargo of oil. [ESP]
55. T "A lot of oil Spilled out and was washed out by the wind." Who is doing the action here?
56. Ss The wind. [OWA]
57. T What is the wind?
58. Ss S1 C'est le vent! [AnsL1]
59. T Okay! So "The wind washed .... Onto the beach." What was washed into the beach?
60. Ss The oil. [IC]
61. T Yes! So "the oil was washed onto the beach 'by' or 'because' of the wind."?
62. Ss By. [OWA]
63. T (Head gesture) [GA]
64. T Next one, "what happened to the water"?
65. Ss S2 It was polluted. [FSA]
66. Ss "The water was polluted." [FSA]
67. T "The beach" now...?
68. Ss [SA]

69. T The verb is “to damage”. So...?
70. Ss S2 The beach was damaged. [FSA]  
(The students Miss pronounce the word damage by pronouncing |id| at the end.)
71. T Yes, it was damaged. [RP] [ESP](The teacher correcting and pronounced the word correctly.)
72. T What about the fishing industry?
73. Ss S1 The fishing industry was ruined. [FSA]
74. T [GA] (the teacher silently invites the students that give an answer to write it on the board.)
75. T And finally “Restaurants and hotels where were ...?”
76. Ss Closed. [IC]
77. T So, all these are the negative consequences of this catastrophe. This is why it is called a “marine catastrophe”.
78. T What do you think happened to the fish after that accident, that catastrophe?
79. Ss They all died. [FSA]
80. T When we talk about the “fishing industry” we are talking about...?
81. Ss [SA]
82. T About fishermen, it’s their job to fish fish. But without fish, there is no fishing.
83. T Now, I’m sure you know all the consequences of the Exxon Valdez catastrophe. Now, we are going to write what we call “a press release”.
84. T After this accident and after all these catastrophic consequences on the beaches on the hotel’s restaurants, and fishermen what happens? The owner of the shipping company...?
85. T What do you mean by the ‘owner’?
86. Ss [SA]
87. T It comes from the verb to...?
88. Ss To own. [IC]
89. T Yes, “to own” which is the synonym of “to have” and “to possess”. [ML]
90. T So, the owner of the ship talked to journalists and apologized for what happened, and for all the damage caused by his ship. But it was not enough to apologize. He also, promised reparations for all the damages
91. T The owner promised reparations for whom?
92. Ss S1 For the owners of the hotels restaurants and the fisherman. [IC]
93. T Why do you think all the hotels and restaurants closed?
94. Ss S2 There are no tourists on the beach! [FSA]
95. T Yes, there’s no one to go to these hotels and restaurants. If the beach is not cleaned. If it is filled with oil of course there will nobody to visit these touristic places.
96. T What about the fisherman? Why did the “fishing industry” close?
97. Ss [SA]
98. T Simply because there was no fish!
99. Ss S3 Please, who did, said the apologies? [Ask]
100. T It is the owner of “the oil transporter”. “Le propriétaire” or the owner of the shipping company. [L2]
101. T Because of what happened there in Alaska were law pursuits against this ship if it did not repair all damages. The workers you see in the picture on the beaches are trying to

- clean everything. This is why he apologized. Is it okay now?
102. Ss [GA] (Nod yes).
103. T So, I'm going to give you a series of notes. You should turn them into the passive voice first. These will be used in the paragraph we're going to call "the press release".
104. T now, remember you have to apologize. Do not forget you are the owner of the ship, so you have to apologize for what happened and you have to give promises. Since it is your fault.
105. Ss Laugh.  
( the teacher explains the activity he reads the introduction just returned the verbs in the notes into the passive voice and form correct sentences )
106. Ss [GA] (Students work on their own to make the sentences from the given notes, order them and write a paragraph.
107. T [GA] (The teacher passes through the tables and checks on every student's work. Sometimes she gives encouragements and clues for right answers.)
108. T (After a ten minutes.) Good! Now we are able to write a press release it's a written form you can read it in the newspaper. But imagine you are giving a speech. How would that sound like?
109. Ss [SA]
110. Do you remember the characteristics of a speech? Do you remember Martin Luther King speech what did he use a lot?
111. Ss S1 Repetition. [OWA]
112. T So imagine yourself, you're giving the speech in front of reporters or on the TV news. What did Martin Luther King do when he spoke in public?
113. Ss S1 He repeated things. [FSA]
114. T That's right! He repeated the same sentences a lot of times. And I said when you use these kind of techniques you can influence the audience. [ML]
115. T So now, in this press release what sentences can you repeat to make an impression?
116. Ss S1 I promise, I promise to! [IC]
117. T (Nods yes!) So we promise to ...? [PR][GA]
118. Ss S1 "We promise to repair the damages." [FSA]
119. T Good! Let's read from the start. What did you write?
120. Ss (Read the press release as if they were making a speech.) [GA]

**4. Lesson script 04 Lesson 4 Causes and Effects of Changing Eating Habits**  
**Writing lesson Third year Science Stream Teacher 4 (Ms B)**

- 1- T How did eating habits change the past 10 years?
- 2- T Do you know? (Asking a students in particular.)
- 3- S1 Ss node. [GA]
- 4- T Yes? Alright then, start like this... answer the first question (do you think our eating habits are different from the past?)
- 5- Ss Yes. [OWA]
- 6- T Why do you think so?
- 7- Ss Fast food. [OWA]
- 8- T Do you think we are not eating like before, Because of fast food?
- 9- Ss ... [SA]
- 10- T Yes, when can say that. But also because...?
- 11- Ss ... [SA] ...
- 12- T Maybe... Because, people work, especially women. The image of the women now is different from the past. They are not housewives.
- 13- T who prepares the meals, clean the cloths and tidy the house?
- 14- Ss S1 the mothers [OWA]
- 15- Ss S2 ----- and sisters. [OWA]
- 16- T that's right! But now mothers and sisters do not have time to prepare meals. This is why more and more boys and girls eat fast food.
- 17- T So then you think that our eating habits have changed these last ten years... And the reason you say is because a lot of people eat outside. What else?
- 18- Ss ... [SA]
- 19- T fine, tell me do you think that advertising contributed in any way to change your habits?
- 20- Ss S1 Yes, "la pub" participated in that. [AnsL1]
- 21- T of course, audio and visual advertising contributed a lot in changing peoples' consumption inhabits.
- 22- T what do they do exactly?
- 23- Ss [SA]
- 24- T They contribute to...?
- 25- T What do you see in advertising? What kind of advertising you do you see on TV?
- 26- Ss ...[SA]
- 27- T where can we find advertising?
- 28- Ss Everywhere! ---- in the newspapers, TV, the internet... [OWA]
- 29- T Street boards, what about the signs on the road. No, even at night at they are shiny. they advertise for the newly launched products.
- 30- T And now we are talking about food so we're talking about it food advertisement, Examples of a food witch is advertised?
- 31- Ss Cheese. Drinks, soda drinks cakes biscuits.
- 32- Ss S2 Produced food.
- 33- T Produced? Do you mean processed food ?
- 34- Ss S4 Yes. [OWA]
- 35- T Alright then, this is what you are going to work on today. You are going to write a paragraph about eating habits changes and what causes them (the changing our eating habits.)
- 36- T (Writing on the board.) So, so far we have 2 Reasons that contributed to this change.

We said. Our eating habits have changed during the last 10 years because one people work outside. Second, advertisements, contributed in changing people's eating habits. **So then I'm giving you a little bit more time discuss these two points.** Our habits have changed. Do not tell me that we are eating grandparents or our parents used to.

- 37- T So what do you think he used to eat?
- 38- Ss Couscous, [OWA]
- 39- T Yes! vegetables. Aha! what about us what do we eat now?
- 40- S2 Ss Processed food. [OWA]
- 41- T Junk food yes we call it junk food.
- 42- T So what made this change what made us eat junk food instead of their vegetables organic food?
- 43- Ss Advertising [OWA]
- 44- T Yes. Advertising! yes we said that advertising contributed to this change in habits how does it do this? a lot the people now think that the advertised food is better than unadvertised one and that it tastes better. They even think it has more nutrients.
- 45- Ss S2 They use of celebrities. [FSA]
- 46- Ss S1 To show the food. To people buy it. [FSA]
- 47- T Of course yes! They want to sell their products. they make people desire it. They do this to attract them, especially the advertisement of soft drinks. Such as..... and other drinks purchased in Algeria. What are other brands you know?
- 48- Ss Hammoud boualem. Fanta.(listing some local brands of soda)
- 49- T What you think about the people who buy them. And think that they are good for the health?
- 50- Ss [SA]
- 51- T These consumers are passive they do not check but they buy what they consume what they purchase. They just eat and leave advertised product they do not think of the consequences.
- 52- T Now we have some hand-outs here, please look at them in pairs! look at the picture and notice what is wrong with the cartoons. This a cartoon okay ? What is the woman drawn in this cartoon says?
- 53- Ss [GA](students take some time to study the hand-out.)
- 54- T First of all please tell me what you see. Can you describe the people in the cartoon?
- 55- Ss The two people, a man and a woman are big. [FSA]
- 56- T Yes they are obese or Overweight. What is the contrary of overweight
- 57- Ss S4Slim. [OWA]
- 58- T Yes, slim or thin. Is it Healthy to be obese?
- 59- Ss No it is not healthy. [FSA]
- 60- T Yes it causes many diseases. Like what?
- 61- Ss Les maladies du cœur, [AnsL1]
- 62- T oui, ou « cardio-vasculaires ».
- 63- T Yes; heart disease. What are the other dangers of obesity? Cardiovascular diseases.. What else? Blood pressure... yes, and diabetes (le diabet)
- 64- T Okay now let's come back to the picture. Let's write something about it. The couple are sitting on their own chair. And they are watching TV.
- 65- T What are they eating? are they eating a full meal?
- 66- Ss No [OWA]
- 67- T Now, what are they doing then they are....
- 68- Ss “Grignoter”. [AnsL1]
- 69- S1 Ss ils Grignotent des chips. [AnsL1]
- 70- T Yes but how do we say that in English? They are nibbling. They are eating snacks.

- 71- T What kind of snacks do you see the picture?  
(Disparate answers,)
- 72- T They eat chips /yes/ biscuits..
- 73- Ss S1 sandwiches. [OWA]
- 74- Ss S4 les frites et les jus. [AnsL1]
- 75- T Yes! sandwiches and French fries, and juice that looks more like a soft drink and sweet and and so on. So here they are eating junk food.
- 76- T So would you please read it to us what's in the little box about junk food. ....
- 77- T What, do you think, is the danger of eating only junk food?
- 78- Ss obesity! [OWA]
- 79- T Yes, people become obese.
- 80- T you can also have anaemia if you do not eat healthy food.
- 81- T So but look at the woman says I do not eat anything like genetically modified food. Because it's unhealthy. Look at that now! As if what she eats is healthy. What is a genetically modified food? Can you please read what's in the little box about genetic engineering? ...

(A student reads)

- 82- T So how can you react to this cartoon?
- 83- T Do you think what you say and what she's doing are coherent or the same thing?
- 84- Ss No! it's different. [FSA]
- 85- T what do we call it when what you say and what you do is different?
- 86- Ss[SA]
- 87- T There's a saying a proverb with goes like that "I say what I mean and I mean what I say." But here it is inadequate.
- 88- T So do they do what they say?
- 89- Ss No![OWA]
- 90- S2 Ss the opposite. [OWA]
- 91- Ss Yeah they are eating food which is poor in nutrients. What is equivalent to say unhealthy. What is nutrition? What do you think it is ?
- 92- T It's its "feeding". Okay? or "nourishing"; it is what gives us important elements for our body.
- 93- T So what do you think about this cartoon? Is it sad ?
- 94- Ss NO! [OWA]
- 95- T No, of course not! It is funny.
- 96- T But here the woman says something with you doesn't mean eats and healthy food and she pretends not eating unhealthy food. So it is ironical.
- 97- T This is what you call irony. We see something but we need something else.
- 98- T Let us recapitulate. The consequences of being obese is the risk of becoming ill or having a lot of diseases. And that results from obesity which results from nibbling all day. Then, we can organize our work and into two parts causes and consequences.
- 99- T Now there must be another cause of obesity do not you think?
- 100- Ss no sport. [OWA]
- 101- T Yes!! Inactivity. The lack of practice. When people do not move when they do not practice sport they gain weight.
- 102- T What is the synonym of the obese again?
- 103- Ss Overweight [OWA] (they are asked to provide a word)
- 104- T yes. Obese is the adjective what is the noun?
- 105- Ss S3 obesity. [OWA] (they are asked to provide a word)
- 106- T Very good! [PR]

- 107- T Please next time, whenever you have a new word like these ones check them in a dictionary and copy then down on your copy books.
- 108- T By the way have you understood the word blood pressure? Say it in French please.
- 109- Ss S2 la pression artérielle. [AnsL1]
- 110- T That's right and cholesterol in relation to heart diseases and blood pressure.
- 111- Ss S1 it also causes "L'insomnie". [AnsL1]
- 112- T Really how so?
- 113- Ss[SA]
- 114- T (after a moment) Oh! you mean that when you're obese you can't sleep very well because of sleeplessness?
- 115- T Okay And even problems of respiration right?
- 116- Ss S3 And diabetes. [OWA]
- 117-
- 118- T Great! Let us write about the ideas we talked about. If you remember something you can add it to your paragraph.
- 119- T So the question of the paragraph will be What are the causes and consequences of obesity?
- 120- T So this is your assignment for tomorrow you can start it now writing your paragraph then at home read the text and enrich your ideas.
- 121- T You can you use expressions like these to express cause "something is due to another" " something is caused by a another" Now we know order to express in sequence we say" as a result' As a consequence The result is, therefore, thus. So please use conjunctions.
- 122- T Before we conclude look at the picture and read the question above. What is the cartoonist's goal?
- 123- T You know what we mean by a the goal The purpose, objective.?
- 124- Ss [SA]
- 125- T Here the cartoonists purpose attract people's attention do the dangers of consuming unhealthy food.
- 126- T So now are you aware of this problem of obesity? You do not want to become like this to people, right?
- 127- Ss NO! [OWA]
- 128- T So pay attention to what you eat. Practice a physical activity and eat healthy food and stop eating junk food.

## 5.1. Lesson Script 05 Lesson 5 Question Intonation

### Lesson in phonetics. Year Two- (Ms N)

1. T Yesterday, I went to the supermarket and I bought pasta, tomato, chocolate, sugar, vegetables ..., and water. What I am talking about here?
2. Ss food! [OWA]
3. T yes what am I making? I am making a ....(gesture) [GA]
4. Ss A list! [OWA]
5. T Yes! A list of all the things I bought in the supermarket. Now, did you notice how I pronounce those words? [ESP] (She repeats the list again)
6. T How is the intonation in the last word water, up or down? (She makes a gesture of her hand going up when she said up, and another bringing her hand down when she said down. With the appropriate intonation of her voice that accompanied the words.)
7. What is the difference if I say “What’s your name?” Is it the same as “Do you study English?” [Exe]
8. T Is there a difference of pronunciation between the first and the second sentence?
9. Ss S1 Yes! [OWA]
10. Ss No! [OWA]
11. T No? Do not you feel any difference? [ESP] (The teacher repeats the two sentences.)
12. Ss Yes. [OWA](All students agree that there is a difference in pronunciation.)
13. T What do we call this in phonetics?
14. Ss [SA]
15. T Where do you hear this difference more?
16. Ss At the end... [IP](independent phrase)
17. Ss; S2 Intonation. [OWA]
18. T Yes, we are speaking of sentence intonation. [ESP ] [PR]
19. T Now let’s see what type of intonation we can hear in this example. “Yesterday was so hot that drank two litters of water.” [Exe]
20. T Do you notice anything special at the end?
21. Ss No! [OWA]
22. T Then, how is the intonation at the end of this sentence? Is it going up or going down?
23. Students up! [OWA]
24. T Really? No! It is going down! Like, when you have nothing more to say. It is the same with the first example of a shopping list! When we finish the list and we have nothing more to add the intonation goes down. If we go back to the definition of a rising intonation, we could say when you say something in a rising intonation the pitch of the voice goes up! You feel it in your voice! The speaker makes extra effort to put on more voice in the last word! Like in, “Did you hear me?” Do you understand? Ok? But is it the same case with the other example? ‘I read two books in one night.’ Is it? [Rule] (mini lecture) [Exe]
25. Ss No! [OWA]
26. T Can you give me other example of the sort?
27. Ss [SA]
28. T Let me help you a little “I worked late last night. And now I am sleepy.”[Exe]

29. T “One day, I read two books in a row.” In your opinion, how is the intonation here?  
[Exe]
30. Ss Down. [OWA]
31. T Indeed! Did you notice how lazy the voice sounded? Try saying it again, please.
32. Ss [Repeat]
33. T Could you please give me other examples like these?
34. Ss S2 “Yesterday I visited my sister.” [Exe]
35. T Yes! [PR] (To the class) “What did Linda do here?”
36. T She just asserted that yesterday she went to her sister to see her.[ESP]
37. T This sentence is in the affirmative form. Generally all affirmations or sentences in the affirmative form finish with a falling intonation.However, in the case of questions or sentences in the interrogative form, its different. [Rule] (mini lecture)
38. Now let me ask you, do you like fast food?
39. Ss Yees!!! [OWA]
40. T [Laugh] Ok! Now then how was the intonation up or down?
41. Ss Up! [OWA]
42. T Ok that’s right! Now look at the question how does it start! [PR]
43. Ss “By do!” [IC]
44. T Yes, the auxiliary verb “to do”. And how did you answer me? When, I asked you, you immediately said “yes” So, when a question starts with an auxiliary verb, such as “do, does, is, are, was, were, will, can, could...etc”, and the answer to that question can only be, a “short answer”, “yes” or “no”. Then it belongs to the type of question we call “auxiliary questions” and generally they all end with a “rising intonation”. Thus we could draw an arrow going up right after the question mark like this[Rule] (mini lecture)
45. T (Reading from the text book.) “A Will you be at the marriage party of my sister next month? [Exe]
46. T “B Yes, of course!” [Exe]
47. T “A do you want a piece of cake?” [Exe]
48. T “B No, thank you. I am on diet.” [Exe]
49. T “A Could you please help me?” [Exe]
50. T “B Yes, just wait a minute please.” [Exe]
51. T Now then say it again? And Give me other examples, please! (instructions)
52. Ss S1 Madam, when is the test? (Out of IRF) [Ask]
53. T [Laugh] you will know in time Youssef. But this is actually a good example – [PR]
54. T Listen here class Youssef asked me when the test is. If it was for tomorrow, for example...[ESP] [Exe] (Back to IRF)
55. Ss Noooo! [OWA] (Out of IRF)
56. T It’s just an example focus! (Back to IRF) [CM]
57. T If the test was for tomorrow I would have answered the question like this “The test will be tomorrow.” Right?
58. Ss Yes! [OWA]
59. T So, I can’t answer by “Yes” or “No” to this question. He asked me“ ‘When’ is the test?” So he asked me about what?
60. Ss S2 Time. [OWA]

61. T About the day of the test. Because we use 'When' to ask about the ...?
62. Ss The time. [IC]
63. T That's right. [PR] So this question is part of the group called "W.H. questions". Why do we call them that?
64. Ss S3 Because of the W.H. Words. Like "when, who, how..." [FSA]
65. T That's correct! [PR]
66. T Now let's summarize what we said previously. We said when we are making a list- any kind of lists, of things, names, actions...ets- as long as we did not finish listing and we keep adding items to the list , the intonation keeps going ...? [Rule]
67. Ss UP! [OWA]
68. T But when we arrive at the last item the intonation falls...?
69. Ss DOWN! [OWA]
70. T Yes, it falls down to mark the end of the list.
71. T Now, let's have a little application about this, please. I would like you to pen your books at page sixty four. (instruction)
72. Ss (flipping textbook pages) [GA]
73. T Now then, I will read and you mark the intonation. It is either 'up' or 'down'. (instruction)
74. Ss Yes! [OWA]
75. T The first exercise. (reading the task instruction) There are four types of alternative energies solar, wind, nuclear.... and hydroelectric energies.
76. T "...four types of alternative energies solar" (repeats the sentence word by word)
77. Ss Up! [OWA]
78. T ...wind
79. Ss Up! [OWA]
80. T ...nuclear
81. Ss Up! [OWA]
82. T "... and hydroelectric energies."
83. Ss Down [OWA]
- T Good! Some one to write this on the board?

## 6.1. Lesson Script 06 Lesson 6 Writing Rights Charter

### Year Two-second year scientific stream Level 2nd Year S.E. Book Getting Through

1. T “Health care right the school authorities must or mustn’t make discrimination between children?”
2. Ss “... mustn’t discriminate among children.” [IC]
3. T Exactly! “We mustn’t discriminate, ‘make difference’ between children. [ESP] [PR]
4. T ... “The parents- teachers association...?”
5. Ss “... must cooperate to solve problems.” [IC]
6. T Exactly, ... “they must cooperate...” not “must to cooperate” “...to solve problems of students”. Now, let’s go to the duties and responsibilities. What are the duties you have? [ESP]
7. Ss “We have the duty to work hard.” [FSA]
8. T “The duty to work hard.” Yes! [ESP] [PR]
9. Ss S1 “...to respect the teacher.” [IC]
10. T Yes! “We have the duty to respect teachers.” What else? [ESP]
11. Ss “...respect the opinions of others.” [IC]
12. T and now “We mustn’t...?”
13. Ss S2 “We mustn’t be the cause of school troubles.” [FSA]
14. Ss S3 “We mustn’t cheat in class.” [FSA]
15. Ss S4 “We must come at 8 o’clock.” [FSA]
16. T Yes, that’s true. Now, take a look at this charter. Please look at its form. This is very important. [PR] (Instruction) [CM]
17. T You’ve got the signature of all participants. First you need to copy it down on your copybooks as it is, then you should fill in all the gaps, and complete the charter according to the duties and rights of children. However, here, we should make some changes. For instance, here, instead of children you write high school students, and in the place of Biscra, we could write Tizi-Ouzou since we live here. (Instruction)
18. Ss [GA] (Students start doing the activity, guided by the teacher, who walks between table rows.)
19. T can I see what you have done Melissa? Let’s see... you have here, must cooperate?
20. Ss [SA]
21. T (Yes! teachers and parents must cooperate to solve problems. Good, but, before that! You should start by the duties and responsibilities of high school students. Do you have any example with mustn’t?
22. Ss S2 Non! [OWA] [AnsL1]
23. T (The teacher addressing another student) Farida! This is what you have talked about before, no?
24. Ss S4 Farida “Teachers mustn’t discriminate among children.”

25. T Yes, that's correct. (Addressing the student who asked the question) Do you see now? Can you think of something that student mustn't do in class?
26. Ss S2 Mrs! J'ai fais tout ça! toute seule. [AnsL1] [Ask]
27. T Bien, c'est très bien. [PR]
28. Ss S5 Mrs ! Est-ce qu'on peut faire une révision avant le devoir ? [AnsL1] [Ask]
29. T Yes, if you want. We can do a little revision after we finish this. What do you want to revise?
30. S1 "Ability!" [OWA]
31. S2 "...auxiliary verb can, regular and irregular form." [IC]
32. T "Ability and capability"?
33. Ss Mrs ! parce qu'on a pas compris quand est-ce que va mettre 'could' ou 'would' et 'are able'. [AnsL1]
34. T It is not a problem! We are going to do some revisions today's after we finish with the school charter. [CM]
35. T So then in the second article "Duties and responsibilities" what do we write?
36. Ss [SA]
37. T Here, we need to fill the gaps. What can we write in gap B? (instruction)
38. Ss [SA]
39. T Billal, what do you have for B?
40. Ss S2 Billal "We have the duty to work hard." [FSA]
41. T or "We have to work hard." Good! [PR]
42. Ss S4 Farida "We mustn't cheat at the exams." [FSA]
43. T yes! [PR]
44. Ss S3 Liza "We mustn't eat in the classroom." [FSA]
45. T All right Liza, to the board, please! [CM]
46. Ss S3 [GA]
47. T ... How do we write "mustn't" Liza? ... [m. u. s. t. n], then you put the apostrophe then t. Thank you. It is the contracted form of 'must not'. Next! [PR]
48. T "We have the duty to respect the rules of the school." [ESP]
49. T What do we mean by 'duty'?
50. Ss [SA]
51. T Something that we have to...?
52. Ss S3 'Do'! [OWA]
53. T Listen all of you, when you do not understand a word, you ask, ok?
- T Well then this is enough. Please copy down what's on the board, quickly please. [CM]

**7.1. Lesson script 07 Lesson 7 Pollution and Global Warming)****1st year book one “At the Crossroads.” year Literary & Scientific - Teacher 5 (Ms N )**

1. T Everybody has got the text?
2. Ss Yes, Mrs. [OWA]
3. Ss S3 One student. (Nodding no). [GA]
4. T Did you have .... Ok, hurry up everybody... you follow me. (Classroom management)
5. T Ok so you read... you start (asking one student to read the text in the hand-outs)
6. Ss Reading the text. [GA]
7. Ss Another student rise her hand (asking permission to read) [GA]
8. Ss A female student resume reading. [GA]
9. T Please according to you, what is the text about? What is the main idea of this text?
10. Ss S1 Pollution [OWA]
11. Ss S2 Different pollutions [NP]
12. T Different what?... pollutions??
13. Ss .... [SA] (hesitating)
14. T Are you sure? Different pollutions?
15. SsS3 No. [OWA]
16. Ss (Collective chatter).
17. Ss S3 Mrs! Different types of pollution! [FSA]
18. T Yes!! Or different kinds of pollution. [ESR]
19. T what is the meaning of “kinds”?
20. Ss types...(french pronunciation) [OWA]
21. T uhum, yes! “Types” in English, or sorts, and genres. [ESR]
22. T yes, genres, like in French “genres” (French pronunciation)(Teacher writing on the white board, and reading as she writes.)
23. T ok... now then, “different kinds of pollution that are [...]”? What are they doing to the environment?
24. Ss global warming . [OWA]
25. T heum, different pollution kinds that are... heum?
26. Ss S1 visible and invisible... [OWA]
27. T visible and invisible what?
28. Ss S2 types of “pollutions” (mis-pornuncittion) [OWA]
29. Ss S2 air pollution... [OWA]
30. T What is pollution doing, here, with air?
31. Ss [SA]
32. T is it talking about air pollution?
33. Ss No, Mrs; ... about global warming! [NP]
34. T uhum, (reading from the text) ... visible and invisible kinds of pollution that are...?
35. Ss contributing to global warming! [FSA]
36. T very good!
37. What is global warming?
38. Ss ‘Le réchauffement climatique.’ [AnsL1]
39. T Merci beaucoup, je ne le savais pas ! (in an ironic tone, kidding with the student for providing the translation in French instead of defining the concept)
40. Ss S3 (trying to explain the process ) it is the Earth getting hotter and hotter in the north pole... and the ice is... hum...[FSA]
41. T Melting (providing vocabulary item)

42. Ss S1 yes! [OWA]
43. T yes! Good.
44. T what is it caused by?
45. Ss S1 It is caused by the air pollution, hum. That causes destruction of the Ozon Leyer. [FSA]
46. T What about the text here? in the text they are giving you some...
47. Ss ideas? [OWA]
48. T Some ideas, about gases that could be responsible for this problem. What are these? what are these gases?
49. Ss S1 CO2... carbon, dioxide. [OWA]
50. T carbon dioxyde or...? [ESR]
51. Ss S2 Green House Gases. [NP]
52. T yes! Greenhouse gas; example which is called the CFC, which is also called...?
53. T- Ss (together) Cloro-Fluo-Carbon. [OWA]
54. T which came from...?
55. Ss S1 refrigerants and \_\_\_\_\_ (interruption) [OWA]
56. T \_\_\_ refrigerants. What are refregerents? What do we mean by refregerence?
57. Ss S1 Mrs, le refroidissement... Mrs, le froid.
58. Ss hhh [laughter] [GA]
59. Ss S4 'le féfrégirateur'[And L1]
60. T tose are the gases we can find in the ...
61. Ss la clim...[AnsL1]
62. T we find them, in the refrigerators. Very good.
63. T So all these gases are destroying ...?
64. Ss the Ozone Layer. [OWA]
65. T Ok! Making in it...?
66. Ss ... trous? [OWA]
67. T des trous... in English "trous"...? [AnsL1] (French)
68. Ss S2 huh... |h| ? [GA]
69. Ss S1 No !! Mrs; he...ho.... [GA] (trying to find the word)
70. Ss S2 |hɔl| (mispronunciation) [OWA]
71. T yes, holes |h|. Making holes. (writing on the board)
72. T so do we write it like this? (hols)
73. Ss S1 no Mrs, with "e" and ... "W" [FSA]
74. T or like this (whole) ? this and this (pointing to both written words) are pronounced |h<sup>ou</sup>lz|. And they are...? Homo...?
75. Ss S3 Homonyms. [OWA]
76. Ss S1 – S3 Homophones. [OWA]
77. T homophones, yes. [ESR]
78. T What are homephones?
79. Ss We hear it the same, but in writing different. [FSA]
80. Yes, so what is the difference? Are we talking about 'holes' this one (pointing at the written word on the board or this one 'wholes'.
81. Ss Mrs, 'hole" without 'W'. [FSA]
82. T with a 'W' which means in... entire; the whole class.
83. T Tres bien! Alors, now, they're asking you to Choose the right answer look at the first question
84. T (reding from the handout) different kinds
85. Ss S1 Mrs, I read it.
86. T diffent kind of pollution.

87. Ss No! [OWA]
88. T is this is the suitable title?
89. Ss S4 huh! The ... the different kinds of pollution.
90. T (echoing) the different kinds of pollution. [ESR]
91. Ss S2 'pollution' just Pollution. [OWA]
92. Ss S1 Global Warming. [OWA]
93. T Global Warming. [ESR]
94. Ss S5 Mrs, Air pollution. [OWA]
95. T Air pollution. [ESR]
96. Ss S6 Mrs, sorts of pollution. [NP]
97. T sorts or types of pollution in general... Anybody else? [ESR]
98. Ss S7 air pollution. [OWA]
99. T Ok let's write all this and then we will check and chose the most suitable one.
100. Ss S2 (write on the board while the teacher dictates. ) writing the first question 'the title of the text'. [GA]
101. T We capitalize title please.
102. Ss S4 Mrs, ' le meilleur c'est' 'kinds of pollution'. [AnsL1](French)
103. T pollution in général ... ?
104. Ss S1 'parce-qu'il ya la pollution de l'air, et tout...[AnsL1](French)
105. T yes. [OWA]
106. Ss S6 Mrs, the air is destroyed by pollution.[FSA]
107. T (echoing) the air destroyed by pollution... can you destroy the air? [ESR]
108. Ss S1- S2- S3 No! [OWA]
109. T you can alter... (Repeats) you can alter the constituents of the air, but you cannot destroy the air. (explanation)
110. Ss different kinds of pollution. [FSA]
111. T yeah! Different! What about different? There is something missing with the word different. (Meaning the words the student has just written on the board.)
112. Ss S3 the 'e' diff 'e' rrent ( French pronunciation) [AnsL1]
113. T yes; do you put an 's' at the end of different?
114. Ss S3 No! [OWA]
115. T why not?
116. Ss S1 different 's'we're taling about kinds. 'Ça indique qu'il ya plusieurs.' On a pas rajouter le « s » Mrs. [FSA] [AndL1]
117. T We are talking about the correct answer. This is not the correct answer.
118. T Why can't we put "here" an 's' (she points at the written word on the board)
119. Ss [SA]
120. T if I can chose, can't the 's' here (at the end of the written word "kinds" and put it here? (at the end of the written word "different")
121. Ss No. [OWA]
122. T Why not?
123. Ss S1 sinon ça n'aura pas le meme sense. [AnsL1]
124. T huh ! No, this is not the correct answer.
125. Ss S4 Mrs... c'est different [AnsL1]
126. T (amused) et? And ? et alors? [AnsL1]
127. T Ok! let me help you. What part of speech is it?(explanation about the form of linguistic sign)
128. Ss [SA]
129. T Is it a noun, a verbs, an adjective?(providing choices od linguistic forms to choose from)

130. Ss no... (thinking) [OWA]
131. T adverb?, proposition? (more choices to choose from)
132. Ss S6 Preposition. [OWA]
133. Ss S2 Adjective. [OWA]
134. T Très bien. [PR] [AnsL1] (French)
135. Ss noun. [OWA]
136. T Noun? Adjective? [ESR]
137. Ss no, adjective [OWA]
138. T (applauding) (followed by other students applauding too) yes, you can applaude her! Adjective! It is and adjective. In English, what's different from the French language? [PR]
139. T in the French language you have to change the ends of adjectives and verbs according to the noun. "cela s'appele
140. (together with students) s'accorder en genre et en nombre" this is the difficulty of the french language. Concerning English. [AnsL1] (French) (providing and explaining a linguistic rule)
141. Ss S1 the adjectives do not change. [FSA]
142. T yes, we do not care about this. (meaning that the in English we do not care about changing the adjective to match the noun it describes!) All adjectives never take 'S' with plurals. Never and ever. (providing grammar rule)
143. T Now let's go back to the first paragraph. (instruction)
144. Ss S1 Mrs, on a fini les questions? [Ask]
145. T No we haven't finished yet. You have to choose the most suitable one (she mean the title of the text) (instruction)
146. T What is the text talking about?
147. Ss S3 Its air pollution. [FSA]
148. T Let's see with the first paragraph. Let's check. We are talking about 'smog'.
149. T Have you checked the meaning of "smog"?
150. Ss S2 Yes, Mrs. [OWA]
151. Ss S1 Smog is a dark.. huh ... a dark smoke... very dark smoke. [FSA]
152. T a-huh. (as a yes)
153. Ss S3 Yes Mrs, 'une fume très noir.' [AnsL1]
154. T smog is the association of two words...
155. Ss S1 What? [Ask]
156. T smoke and...
157. Ss S1 and Gas! [OWA]
158. Ss laugh
159. T No...
160. Ss S2 'tu y était presque' [AnsL1] (Ss/Ss ineration.)
161. T look at this! (Pointing at the window.) Can you see the mountain?
162. Ss No.[OWA]
163. Why not?
164. Ss S2- S4 le brouillard.[AnsL1] [OWA]
165. T yes! It's the "Fog" c'est le brouillard en français. [AnsL1] [ESR]
166. Ss S1 so it's a fusion between smoke and fog.[FSA]
167. T yes, it's a fusion. That's it. [ESR]
168. T (reading the first paragraph) so here we're talking about global warming and we're talking about smog.Smog is concerned with air pollution.
169. Ss S1 Yes [OWA]
170. T On continue! Let's carry on. [AnsL1]
171. Ss yes, Mrs. [OWA]

172. T carbon dioxide, the greenhouse gas, is the main pollutant of Earth. What is a pollutant?
173. Ss [SA] (thinking)
174. T What part of speech is it? Is it a noun, is it an adjective... is it a verb?
175. Ss S2 an adjective. [OWA]
176. T it ends with \_\_\_\_
177. Ss pluTANT.
178. T .... Tant.
179. Ss S4 c'est un adjectif non? [AnsL1]
180. T Like "contaminant" a "pollutant.
181. Ss S1 it's a noun !
182. Ss adjective [OWA]
183. Ss S4 adverb [OWA]
184. T "Ai! ayemma!" (Mimicking being hurt by the answer, implying that it is definitely wrong.) [AnsL1]
185. T "is the main pollutant" (reading the sentence containing the word.) 'Main', what do we mean by 'main'?
186. Ss S2 Mrs, c'est la raison principale. [AnsL1]
187. T principle!
188. T so, "... is the principle pollutant." So pollutant here is... ?
189. Ss S2 it's a noun, « c'est le principal polluant ».
190. T it's a noun. [ESR]
191. Ss S1 But I said it. [FSA]
192. You said it was an adjective, it's not an adjective.
193. Ss S1 No! I said it's a noun, you did not hear me. [FSA]
194. T Okay! Are we still talking about air pollution here?
195. Ss yes! [OWA]
196. T we're talking about air pollution, global warming... huh? Are we talking about different kinds of pollution here?
197. Ss No! [OWA]
198. T well, yes, it is a kind of pollution. But, not all of them.
199. T ... Volcanic eruption... (carrying on with reading the first paragraph of the text.) what do we mean by "Volcanic eruptions" ?
200. Ss S1 when a volcano is erupting... [prepositional clause]
201. Ss S2 irruption d'un volcan. [AnsL1]
202. T are we focusing on land pollution here?
203. Ss S1 No! [OWA]
204. T ... or on air pollution?
205. Ss air pollution. [OWA]
206. T Very good, let's carry on!
207. T volcanic eruption release an... amount of sulphuric acid in the atmosphere , sometimes causing cooling which lasts for years.
208. Ss S1 Ici aussi, it's air pollution. [AnsL1]
209. T carrying on reading. "... most people agree that a variety of measures need to be taken on a personal level driving and flying less." We're talking about driving and flying less. When you drive and fly less, what does it mean? you are contributing...? To reduce...?
210. Ss S3 ... to reduce the air pollution. [FSA]
211. T very good! (she resumes reading "recycling...carbon dioxide") \_\_\_\_\_
212. Ss S1 C'est un polluant aussi. [AnsL1]
213. T \_\_\_\_\_ and carbon dioxide is a gas (note She said this on purpose to relate it to the

- air)
214. T Now, then, all the test is talking about...?
215. Ss Air pollution. [OWA]
216. T ok, then you erase all the other suggestions.
217. Ss S1 pollution in general, it is too wide, we have to specify. [FSA]
218. T Yes, too vague. (... Pause)
219. T Finished? (Addressing the class, "as in have you finished copying what's on the board?") Now let us deal with the first, or the second question.
220. Ss S4 Mrs... (Pointing at the hand-out) (She' is asking if she can read the question.) [GA]
221. T yes, yes Miss, uhuh! (accepting)
222. Ss S4 (reads the question "a true or false question) different kinds of pollution prevent global warning. [FSA]
223. Ss S4 No Mrs! [OWA]
224. Ss S1 C'est "C" (he means answer "C") C'est "prevents".
225. Ss Prevents? (the rest of the class do not agree) [OWA]
226. T Do you remember what is the meaning of "prevent"?
227. Ss S1-S2-S4 c'est "prévenir"! [AnsL1]
228. Ss (then realizing) No!!
229. Ss S2 Mrs, Stops global warming! [FSA]
230. T go to your copybooks... what do we call it? "Prevent"
231. Ss S4 a false friend, un faux ami.
232. T yes, des faux amis! Et on la fait en classe en plus ! to prevent is to stop, .
233. T so here... correct yourself Siham.
234. Ss S4 different kinds of pollution.... Hum.... (hesitating between two answers. )
235. T are you hesitating between "Solve" and "Give"?
236. T what is the meaning of "Solve"?
237. Ss "résoudre"[OWA] [AnsL1]
238. Ss S1 solution![OWA]
239. T It is the verb of the noun solution, yes! So, what do you think?
240. Ss S1 c'est "give". It's obvious. [FSA] [AnsL1]
241. T Its obvious, Ok!, so give. [ESR]
242. T Two, A. yes?
243. Ss S3 Mrs ! je fais la deuxième? [AnsL1]
244. Ss S3 Mrs, je met direct la réponse ou j'écris la phrase?
245. T C'est bon ! direct, c'est bon. [AnsL2]
246. Ss S4 Fluor-carbon has a destroying effect of the Ozon Layer.
247. T what do you think?? Is it correct??
248. Ss Yes! [OWA]
249. T what if I said B?
250. Ss Encouraging?
251. T Encouraging. Here, why is it not accepted, according to the meaning it will be incorrect. But according to the form, look at the form "it has a....." is it correct to put encouraging in the blank?
252. SS S1 yes, even destroying can be there! [FSA]
253. Ss S3 outhefhimed -ara achu denna! [AnsL1] (Berber)
254. Ss S1 si fahmaY dachu tevYa adini .. 'd'après amek ideYli la phrase enni t-zemred. [AnsL1] (Berber)
255. Ss S3 parce que ça peu être la solution pour ... heu .. the Ozon Layer. [AnsL1] (French)

256. Ss S4 « a » Mrs, on ne peut pas dire « a encouragement » ! [AnsL1] (French)
257. T Why not ?
258. SS S4 « an encouragement » !!
259. T Ok ! that's it!! Can you say "a elephant"?
260. Ss NO! an elephant! [OWA]
261. T "AN elephant"! why? [ESR]
262. Ss S4 Voayelle voyelle. [NP] [AnsL1]
263. T yes, then you have a vowel here (pointing at the beginning of the word written on the board) the article changes into "an"; "an encouraging" so here encouraging is left a side. You won't choose is because of this rule first, and you have two other options either you choose between the "positive" or "destroying". And you go back to the meaning of the sentence and you chose "destroying". So (2-C). Excellent! [PR].
264. T Third!
265. Ss S4 Complete the table!
266. T yes! Complete the table. [ESR]
267. Ss S4 We have a pollutant caron dioxide |p o l u 3 n| (mis-pronunciation) [FSA]
268. T Pollutant ! |p 3 l u t 3nt |
269. Ss S4 Pollutant (repeated the word with the right pronunciation)
270. T En français on dit un polluant. Et en anglais on dis « polluant » on rajoute un « t ». [AnsL1] (Berber)
271. Ss S1 (echoing the teacher) on pronounce le « t ».
272. Ss S4 Carbon dioxide. The consequence warming the Earth. [FSA]
273. Ss S1 goal warming "warming Earth".
274. T Est-ce qu'ils ont préciser? Did they give the precise answer? (translation) [AnsL1]
275. Ss No! [OWA]
276. T What are the consequences of carbon dioxide here in the text? And you have to check in which paragraph you find it.
277. Ss S1 Mrs, in the first sentence of the paragraph two. [FSA]
278. T Yeah? [OWA]
279. Ss S1 ... is the main pollutant that is warming earth... [OWA]
280. Ss S4 On peut dire aussi polluting air. [OWA]
281. T all these gases are polluting the air. But we have to precise we have to give a specific consequence. So .... is warming the earth
282. T wait a minute ... ok! What about B?
283. Ss S3 Consequences destroy the Ozon Layer- pollutant CFC's.
284. T Ok! CFC's deteriorate... it is like in French. The same meaning to deteriorate. Which means to destroy in the long run.
285. Ss S1 in the long turn;
286. T yeah! The third one, yes, Go ahead!
287. Ss S1 Sulfure dioxide causes acid rain and reflex light.
288. T capital letters please! Capitalised C and F, and C. what about the Apostrophe. "CFC's. (supervising the student writing on the board)
289. T And the last one?
290. Ss Sulphur Dioxide. [OWA]
291. Ss S3 Mrs? C'est "s u l f u r|or |s a l f u r|?" [Ask]
292. T c'est "Sulfure" en français, and |s^l f 3r| pronounced in English.
293. T now! Look at this. Here, you are writing the consequences here as a verb, and here as a verb and what about this one? Warming Earth is in it as
294. Ss noun! [OWA]
295. T As a noun. Can you change it to a verb?

296. Ss Warm. [OWA]
297. T carbon –dioxide is singular or plural?
298. Ss [SA]
299. T is it in the singular form or in the plural form?
300. Ss S1 Singular. [OWA]
301. T singular! Then we say “warms” |wɔ̃ mɔ̃| do not forget the “zzz” (comically lengthening the sound |z|)
302. Ss laught!
303. T Now, then copy down your table. Finish drawing it. Underline “pollutant” and “consequences” and you join your mates. Thank you very much.
304. Ss S2 Mrs, I continue? Mrs, I write? [Ask]
305. T what? What is coming next? Answer the questions according to the text. Anyone else? I am just orking whith the same students, the others are “sleeping”. You are all so sleepy!
306. Ss C’est le couscous qui a fait ça! [AnsL1]
307. T Oh did you eat couscous today?
308. Ss laughing, yes!
309. T was it tasty? Vous avez rien manger? Did you eat in the canteen? [French]
310. Ss S4 yes.
311. T what aout you did you eat in the canteen?
312. Ss S3 No!
313. T did you eat home?
314. Ss S3 No!
315. Ss S1 Did you eat?! (Meaning “did you eat at all?”)
316. T Are you fasting?
317. Ss S3 No! [OWA]
318. Ss laughter!
319. Ss S1 il ne mange pas Mrs! [French ]
320. T Quel est ton nom ? tu ne sais pas ? alors, je confirme ! tu es sûre que tu na rien pris ? [French]
321. Ss laughter !
322. T Now then! What is the other question?
323. Ss S3 Mrs, I read it?? [Ask]
324. T La première! C’est tout! Ok! Go ahead! [French]
325. Ss S4 The similar tween carbon-dioxide and Sulphur-dioxide ...
326. T the “similar”!?
327. Ss the similarity
328. T similary?
329. Ss the similarity! Ty!
330. T the similarity [ESR]
331. Ss S4 (resuming reading) the similarity between carbon-dioxide and Sulphur-dioxide is to be the main cause of t....
332. T Oh my god! What is she doing here? (to the class)
333. Ss She is reading everything. [FSA]
334. T You are (addressing the S4) this is what you are doing! You just found the word “volcanic eruption” and “oh there it is”! Then you took the whole sentence. You have to paraphrase!
335. Ss S1 Mrs, let me try. [FS] the similarity between volcanic eruptions and sulphur dioxide is that sulphur dioxide is emitted during a volcanic eruption takes place. [FSA]
336. T Yes! and what are the consequences?
337. Ss S1 They are causing acid rain and air pollution. [FSA]

338. T both of them?
339. Ss yes! [OWA]
340. T no! What is the difference between them?
341. Ss S1 When a volcanic eruption takes place they emit sulphur dioxide.[FSA]
342. T This is it, so? I know! But what are the consequences of these two elements?
343. Ss [SA]
344. T this is the similar or common point between the two!
345. Ss S1 a Sarah ektev, dneq am didictine! The similarity between sulphur dioxide avec “e” à la fin, and is that whenever volcanic eruption takes place .... Takes place... place... it emit... emite - s “e”- and they both cause acid rains, and reflex, reflects light. A Sarah reflects avec C T. [French and Berber] [Ss/Ss interaction]
346. T (checking what is written on the board.) .... Emits ‘without ‘e’ and they both cause. You know the rule “Djamila and Fadila both play, or plays”?
347. Ss Play![OWA]
348. T yes! Without ‘s’ Then they both cause acid rain and they both reflect the light.
349. T yes, next one, next question, yes go ahead.
350. T What does it mean flay and drive less? fly?
351. Ss Voler, les avions, « plans »! [OWA]
352. T So we’re talking about planes! On ne sait jamais!
353. Ss laugh!
354. T Ok! But how would you give the full answer now, the full answer, go back to the question and try to make a meaningful sentence.
355. Ss S1 The government should impose taxes on carbon-dioxide emissions and gasoline (he pronounced it |g ae z o l ai n|.) [FSA]
356. T Gasoline |g ae s l I n|. .. To.. in order to what,
357. Ss S1 The government should impose taxes on carbon-dioxide emissions and gasoline in order to pollute less. [FSA]
358. T In order to pollute less. [ESR] ok, write in on the board, You dictate on her.
359. T How to say government?|g^ v e r ne m en t|?
360. Ss |g^ v e r ne m en t|
361. T Now then, there is a silent letter here! We say |g ^ v m n t|!
362. T Time is over, and class will be dismissed in two minutes.
363. Ss S4 Dis ... what? [Ask]
- T hhh dismissed. On dirait une mission impossible. [French]

### 8.1. Lesson script 08 Lesson 8 Expressing Regrets and Wishes

#### Grammar Lesson) Level second year stream Literature and Philosophy Teacher 1 (Ms H)

1. T Right, everybody is here anybody to remind me what we did last time? There were many absentees last time, « il y avait beaucoup d'absents la dernière fois. »
2. Ss Yes.
3. T Ok! What did we do?
4. Ss S1 "Wish". [OWA]
5. T "Wish." Ok "wish". What did we say concerning "wish"? [ESR]
6. Ss [SA]
7. T What does it mean 'wish'? can you give me a synonym of "wish"?
8. Ss S2 Madame! "If only." [OWA]
9. T Ah Yes! "if only"... [ESR]
10. T And what do we express with 'if only'? When we say 'if only' "c'est suivie par quoi?" [inde]
11. Ss S1 « Si seulement » "nay khati"? [AnsL1] [AnsL2]
12. T "Si seulement..." [ESR]
13. Ss Laugh.
14. T Alors? Hurry! (To late students entering the classroom.) [CM]
15. T So we say we use regret express...
16. Ss Madame! Regret (r i g r i t| mispronunciation) [OWA]
17. T "Regret". [ESR] Ok! So we talked about the term "regret". Yes!
18. T Another regret in the past? Something you are regretting and you will never be able to correct or to change?
19. Ss [SA]
20. T Yes, what is it? Cela vous est a tous arriver, non ?.. quelque chose que vous regrettez dans le passer ! Alors? [L2]
21. T Rafik! Open the window. 'hel etaqa'! [L1] "Lève-toi. Tourne-toi, ferme la fenêtre" [L2]! You follow! (implying that the last utterance is an order as much as the precedents) [CM]
22. T Alor! What are you regretting? What did you regret in the past?
23. Ss [SA]
24. T Ça va! Vous n'avez aucun regret! 'Allahibarek'! Formidable ! Moi, j'ai beaucoup de regrets dans la vie ! vous, vous n'avez pas de regret? [L2]

25. Ss S1 Si! ... d'être née. [AnsL1]
26. T Laugh! Nooo ! pas à ce point ! [L2]
27. T What about regretting something in the present? How would you express it in a sentence?
28. Ss [SA]
29. T For example you want to be a 'hem'... What do you want to be?...
30. Ss S3 A teacher. [OWA]
31. T Do you want to be a teacher?
32. Ss S2 a doctor. [OWA]
33. T She wants to be a teacher. She wants to be a teacher right now. She is regretting a situation. She has regrets not being able to be a teacher. Ok? It means that, "I am a doctors but I have always wanted to be a teacher." [EXE]
34. Ss Laugh (Implying that it's not likely to happen.)
35. T So, "I have always wanted to be a teacher but unfortunately I am a doctor." [EXE]  
Qu'est-ce que je vais dire ? comment je vais m'exprimer en français? [L2]
36. Ss S1 « Je regrette d'être un docteur. » [AnsL1] [FSA]
37. T Très bien, ou alors ? [L2]
38. Ss S2 « Je regrette de ne pas être prof. » [FSA ] [AnsL1]
39. T Très bien ! Et avec 'si seulement'? [AnsL1]
40. Ss S1 « Si seulement...huh! » [OWA]
41. Ss S2 "If only I was a teacher." [FSA]
42. Ss S1 "Si seulement j'étais un enseignant.» [AnsL1]
43. T Et en anglais?
44. Ss S1 "I wish a could..."
45. T "I wish..." [ESR] you are regretting it now ! Do not forget 'Michael Jackson's dance the moon walk'
46. T 'I wish I...'
47. Ss S1 "If only..." [IC]
48. T Aha! Non, regardez ici. « I wish .... To be a teacher..." [EXE](leaving gaps for students to fill) I am regretting a situation in the present. So we have to go back to the tense... past simple'
49. Ss were! [OWA]
50. T "were!" "Wish I were a teacher." [ESR]

51. T why not "...I was a teacher."?
52. Ss S1 Madame, parce que c'est impossible. [AnsL1]
53. T "Wish" means "if only". And with 'if', 'to be' is always given with 'were'. Ce n'est pas un passer, c'est un 'subjonctif'- it's a subjunctive but...- [rule] mais, c'est pas la peine d'en parler. [L2]
54. T what about this, "I have loved her and she left me years ago..."[EXE ] (mimicking crying.) [GA]
55. Ss Laugh
56. T "She left !" Can she come back?
57. Ss No! [OWA]
58. T 'khlass!' [L1] 'it's too late, too late !' (In a dramatic way) "she won't come back. She LEFT!" C'est bon! "Elle ne reviendra pas!" [L2]
59. Ss Laugh!
60. T "She left!", "I wish" (means) you are regretting a situation in the past, and you go back in to the past.
61. Ss Did! [OWA]
62. T "Did" in the past simple? Do? present? Or done? You have to go back to which tense?
63. Ss Past simple! [OWA]
64. T Past simple? [ESR]
65. Ss S1 Past perfect (haphazardly) [OWA]
66. T Past perfect? What is the form of the past perfect?
67. Ss S1 "had"... , plus huh..."done!" [FSA]
68. T What is the form of the past perfect?
69. Ss Laugh
70. Ss "Had..."[OWA]
71. T "Had"... plus... ? [ESR]
72. Ss "Participle..." [OWA]
73. T Past participle. The verb here is to "lie". "I wish I had... to her" [Exe]
74. Ss "Lied." [OWA]
75. T "I wish I had lied to her." [Exe]
76. Ss S2 "To her?"
77. T "Ih!" "I wish I had lied TO her" yes or no?
78. Ss Yes! [OWA]

79. T 'Saahaaa!'. [L1] "Did he lie?" « Est ce qu'il a menti? Il a menti. Donc est-ce qu'il va regretter d'avoir menti ? ou de ne pas avoir menti ? » [L2]
80. Ss S3 « D'avoir menti ! » [AnsL1]
81. T donc... ?
82. Ss « I wish .... » [IC]
83. T "I wish...." [GA] (made a negation gesture with her hand) [ESR]
84. Ss "I wish I hadn't lied to her." [FSA]
85. T Good! 'I wish I hadn't lied to her.' [Exe] [PR]
86. T You have always to give the opposite situation. When you regret you give the opposite situation. [Rule] If you lied, you regret having lied. Donc vous allez dire "Ah! Si seulement je n'avais pas menti. » 'machi' « si seulement j'avais menti. » Ça y est vus avez menti. C'est bon ? [L2] [Exe]
87. Ss S1 C'est bon! [AnsL1]
88. T D'accord ? Alors avec "si seulement" vous donnez l'inverse de la situation. [Rule] "I have robbed a bank, and I am in prison.<sup>3</sup> Alors, on va dire quoi? "I wish..." [Exe] [AnsL2]
89. Ss "I wish I hadn't robbed a bank." [FSA]
90. T "... robbed a bank, yes!" [ESR] si vous dites 'I wish I had robbed a bank' what does it mean? [Exe]
91. Ss S3 "Il va encore la braquer! » [AnsL1]
92. T Ok! C'est bon? [PR] [L2] "'wish I had NOT robbed the bank. And I wish I were not in prison." [Exe]
93. T "Right now. I am regretting being in present now." Ok? Je regret quelque chose dans le passé le vol. Et je regrette d'être en prison maintenant. Ok?
94. T What about the future? Is it "a regret" when you talk about the future?
95. Ss S2 Non! Parce que, on n'a pas encore vécu la situation. [AnsL1]
96. T Très bien! Then what are we talking about?
97. Ss S2 Un souhait. [AnsL1]
98. T Very good! You are wishing to change the situation in the.... [PR]
99. Ss S1 future. [OWA]
100. T Example! Give me an example.
101. Ss [SA]
102. T Give me an example, in the future. "La dernière fois c'est dans cette classe qu'on avait dit » « I wish I would fly. » ? [Exe]. (making gesture with her arms of a bird flying)

[GA]

103. Ss S2 “I wish I could pass this exam.”[FSA]
104. T Yes! (writing the example on the board) “I wish I could pass my exam”. What is the difference between the two? Look at these two sentences. ‘I wish I would fly.’ and “I wish I could pass my exam”.
105. T Is it correct to say “I wish I would”?
106. Ss No! [OWA]
107. T Traduisez « si seulement je ...voulais ? »
108. Ss Non ! [OWA]
109. T « Votre cerveau va exploser ! tout se passe dans le cerveau. Vous êtes en train de souhaiter ! Ça se passe dans le cerveau ‘wella’ dans le cœur ? » [L1] [L2]
110. Ss Dans le cerveau ! [AnsL1]
111. Ss S4 Dans l’estomac !
112. T (Laugh!) L’estomac !? Saha ya rebi ! [L1] [L2]
113. Ss (Laugh!)
114. T « vous souhaiter “would ?” You are talking about ‘will’ la volonté. D’ou viens la volonté? “mel qelb?” du Coeur? De la main ? [L1] [L2]
115. Ss Non! du cerveau! [AnsL1]
116. T On ne peut pas souhaiter vouloir!
117. Ss « seg-wul » !
118. T Comment ? ‘seg- wul’ ? [ESR]. Dans le cœur, il n’y a que l’amour. [L1] [L2]
119. T Alors ! Can you correct yourselves here?
120. Ss Yes! [OWA]
121. T “I wish I...”?
122. Ss « \_\_\_could fly. » [IC]
123. T Très bien! Et si on avait “I wish he...”?
124. Ss S2 “he would”“nay”“could”“kif kif. [AnsL1]
125. T When you change the subject you can use either “would” or “could”. [ESR] [Rule] It is correct. Not when you have the same subject.
126. T S5 what are you doing? Sure? You want an example about what?
127. T Ok, nous avons trois situations.Three situations You regret something in the present ‘مثلا’ « Tu rentrer en cours d’anglais, tu va arriver en retard. ‘نقولكم تدخل’ « devoir ». Qu’est ce que tu va te dire? Tu va te dire « Si seulement j’ai reviser. »

128. Ss S5 « Si seulement je n'étais pas venu. »
129. Ss (Laugh !)
130. T You regret a situation in the present ! oui ou non ? Très bien ! On avait dit With « wish. » la fameuse danse de Mickael Jackson tu connais ? Comment ? comme ça?(she mimics the dance going forward) ou 'akka?' (she tries to dance to the side) [L1][L2]
131. Ss General laughter.
132. Ss S2 “The moon walk, madam, you go to the back!” [FSA]
133. T « The Moon Walk » Ça veut dire reculer! This is what you have to do here. “Grammarians”, les grammairiens nous disent. –ils ne disent pas ça « Moon walk », ça, c'est moi qui le dis. Ils disent.... ?
134. Ss S2 Shifting ! [OWA]
135. T Yes, it is called back-shifting. What does it mean?
136. T (answering her own question) It means that if you are regretting a situation in the present you go back to...?
137. Ss Past Simple [OWA]
138. T \_\_ You go back to the past simple. [ESR] If you are regretting a situation in the past you go back to the past perfect have plus...?
139. Ss Past Participle. [OWA]
140. T And if you want to change a situation in the future..
141. Ss “would, or could plus have.” [IC]
142. T This is the rule a Mr Smaili. On dit merci!
143. Ss (Laugh!)
144. Ss S5 “I wish ‘Sisi’ go out with me.”[FSA] (S5 give an example without an invitation.)
145. Ss General Laughter!
146. T (Waiting for students' attention.) Allez !Ça-y est, soyons sérieux! On s'amuse mais on travail ! Ok... [CM] (trying to re-establish silence)
147. T Is she your girlfriend now? (elaborating on S5's example.)
148. Ss S5 No! [OWA]
149. T No, she is not. So you are wishing something in the present or in the future or in the past?
150. Ss In the future. [IC]
151. Ss S5 Bientôt! [AnsL1]
152. T Bientôt?! (Laugh!)
153. Ss (Laugh!)

154. T (To class) On se calme! (To S5) Alors, another example ? A tu un autre exemple aussi fantastique que ça ?
155. Ss Laugh.
156. T A tu un autre exemple ? [L2]
157. Ss S2 c'est un bon exemple [AnsL1]
158. T Il est formidable ! Il exprime res bien ce qu'on a fait ! [L2]
159. Ss S5 Mrs, C'est just un exemple! [AnsL1]
160. T Oui! Je te crois ! Je te crois ![L2] [PI]
161. Ss (Laugh!)
162. T Allez! Give me another example, please! (Addressing S1) You can give me a good example in the future! What do you want to be in the future?
163. Ss S1 "Footballeur!" [OWA] [AnsL1]
164. T A football player? [ESR]
165. Ss S4 Voyager! [OWA] [AnsL1]
166. T Ah! Comment dit-on voyager en anglais?
167. Ss "Travel." [OWA]
168. T Ok ! now! Can you remind me of what 'I wish to' means ? que veut dire 'I wish to'? [L2]
169. Ss Je Souhaite !
170. T No! 'I wish TO' means 'I want' 'I wish TO' veut dire 'je veux'. Je ne suis plus entrain de souhaiter. It means 'je veux'.
171. T 'I wish' followed by the subject. "I wish I...?" (reads as she writes the new example on the board.)
172. Ss "travel." [OWA]
173. T "Could?" 'Wella' "would"? [L1]
174. Ss "Could." [OWA]
175. T "A l'étranger" 'a broad'
176. T So you erase all this, this is a remedial session let's see if everything was grasped. Et on attaque autre chose! [L2] [CM]
177. T By the way, get ready for a test, perhaps on Wednesday or Thursday. And be here! [CM]
178. Ss When??
179. T Either Wednesday or Thursday. [CM]

180. T That's Right ! Tarik est absent. Pourquoi? (Inquiring about a student) [PI]
181. Ss 'd-afel ar yursen' [AnsL1]
182. T Ah il a neiger ? Il n'habite pas à Michelet pourtant ? [PI]
183. Ss Il habit a Beni Zmenzer.
184. T Ok. C'est bon? C'est fini? [L2] And we have seen what is "provided that". What is "Provided that?"
185. T Yes? What is provide?
186. Ss S4 "un equivalent"
187. T An equivalent of 'If' and 'only if. Good.

### 9.1. Lesson script 09 Lesson 9 The Passive Voice

#### Grammar Lesson Third year Year book 3 "New Prospects" Literature and Philosophy Teacher 1 (Ms H)

1. T You follow! So for today, we are going to talk about something you see again and again and again every year! Every year we're asking you to turn sentences from the active form to the passive form. On vous a embêter avec la voie passive je sais! Mais est-ce que vous avez mémorisé ? [L2]
2. T What is the difference between active and passive? En français, quelle est la différence entre une phrase active et une phrase passive? [L2]
3. Ss [SA]
4. T Si je vous dis... 'for example'... Let me first give you an example. (Writing on the board).
5. T All right! Look at this "After the assassination of Boudiafe our president." [Exe]
6. Ss S1 "Athirhem rebi." [AnsL1]
7. T Voila! Alors, what happened ? Some newspapers printed this sentence. (Pointing at the one written on the board) and some others have printed this one. (She wrote another sentence) "Someone has assassinated Boudiafe, yesterday." Alors? What's the difference between the two sentences. [Exe]
8. Ss S1 Pour attirer l'attention sur le plus important. [AnsL1]
9. T C'est celle-là, la plus importante? (Teacher pointing at the second sentence) Pourquoi? [ESR]

10. Ss Elle est courte. [AnsL1]
11. Ss S2 No!! [OWA]
12. T « An3am ? » [L1]
13. Ss S1 Madame, on ne peut pas dire « Boudiaf... euh...he had ... on va dire... assassinat du président. » Après on va rentrer dans les détails. Donc c'est la deuxième la plus importante. [AnsL1]
14. T Donc vous allez tous voter pour la deuxième ?
15. Ss Yes! [OWA]
16. Ss S3 Huh... Mrs, la premiere. [IC]
17. T Pourquoi?
18. Ss “Boudiafe was assassinated by X” or “X assassinated Boudiafe.” There is a deference in the importance.
19. T When I use this one Celle que vous penser être importante. Here, you are giving importance to Mr X.
20. T In the active form, you are giving importance to the doer of the act à celui qui fait l'action, c'est a dire Mr X. [Rule]
21. T In the passive form you are giving much more importance to the action. The action is important, so when you write in the passive voice, this means the action is important, which means also, that who is doing the action is not important.I can drop it out. Je peux l'enlever. Le meilleur exemple de la vois passive c'est en arabe (المبني للمجهول) it means on est pas obliger de dire 'شكون' c'est qui. [L1] [L2] [Rule]
22. Ss S2 غير معروف [IC]
23. T Exactly! [PR]
24. T Now, tell me what are the changes that are operating in the sentence? It is the same as in the French language ‘in the active form you have the subject, verb and the object. In the passive...c'est?
25. Ss L'inverse! [OWA]
26. T Très bien, L'inverse! [ESR]
27. T Est ce qu'un enfant de cinq ans peut le faire ?
28. Ss Oui!! [OWA]
29. T Très bien! Oui, une vielle de quatre vingt ans peut le faire, non ?
30. Ss Oui, [Laugh] [OWA]
31. T Très bien.Alors, regardez bien ...and then I will give you an example to put in

practice.

32. T Shut! S'il vous plaît! (Trying to get silence.) [CM]
33. T You have this form,... In the active voice...
34. Ss S2 Subject plus verb plus object. [IC]
35. T Yes, and when you have to turn it into the passive form, of course you have to change the order ...
36. Ss Of the subject and verb. [IC]
37. T This happens for example in the present! Is it the same tense? "Boudiaf was assassinated yesterday." , "X assassinated Boudiaf, yesterday." Is it the same tense? [Exe]
38. Ss Yes! [OWA]
39. T We are talking about the tense, it is the same tense.
40. T Now if my verb here is given in the future. It should be in the future too. (Pointing at the verb in the second sentence.) [Rule]
41. T Voici, l'erreur des élèves. Same text ok! Now what about the form of the verb? En français, vous le connaissez très bien. A quoi est égale le verbe de la vois passive? It is composed of... ? [L2]
42. Ss S2 L'auxiliaire. [OWA]
43. T Le quel? [L2]
44. Ss Avoir. [OWA] [AnsL1]
45. T Non ! c'est l'auxiliaire Être. En anglais.... ?
46. Ss To be. [OWA]
47. T Plus...? (writing on the board inviting student to continue) [L2]
48. Ss Past participle. [OWA]
49. T Past participle of what verb? Le verbe de la voie... ?[L2]
50. Ss Active! [AnsL1]
51. T Active! [ESR] [L2]
52. Ss Yes! [OWA]
53. T Ici, qu'est ce qu'on a fait? On a rajouter ...?
54. Ss To be. [OWA]
55. T Donc vous rajouter 'un' élément chaque fois que vous devez transformer une phrase de la voie active a la voie passive, 'لازم تزيدوا واحد, زائد واحد' if myverbhereiscomposed of two, 'زائد واحد' ça donne ?
56. Ss Three. [OWA]

57. T Très bien ! [L2]
58. Ss Laugh.
59. T Deux plus un, ça fait trois et pas deux! Donc si, moi, je vous donne un verbe composer de trois \_\_\_\_
60. Ss S3 Four. [OWA]
61. T \_\_\_\_ Et que vous me donnez trois... ça veut dire que 'متعرفوش تحسبو' [L1] Ok ?
62. Ss Ok! [OWA]
63. T Donc, 'زائد واحد'! Let me give you an example "They will fix it." ....First step You have to check where the verb is. C'est la première étape. Où est le verbe? [Exe]
64. Ss "will fix" [IC]
65. T "will fix" [ESR] This is your verb "will fix" what does it mean?
66. Ss [SA]
67. T This means that what comes after is an "object" and what comes before is "subject". [Rule] Donc, je fais ce qu'un enfant de cinq ans peut faire. Donc, j'écris "it" après uhum... après "they". Vous êtes d'accord?(Writing on the board leaving blank spaces.) [L2]
68. Ss Oui! [OWA]
69. T Maintenant, je vais compter. One, two, 'زائد واحد'...?
70. Ss Three. [OWA]
71. T Then one, two, and three (She divides the black space she left between the object and the agent.) Comment je vais remplir ces vides? Vous avez la troisième partie. Here it is. Je commence toujours par le participe passé. Donc, je prend mon verbe ... c'est quoi mon verbe ?
72. Ss "will fix". [OWA]
73. T Ala ! (No, in Berber) « will » c'est pour le future.
74. Ss « fix. » [OWA]
75. T Donc, je prend mon verbe je le place à la dernière position. Je mets « fix » mais en participe passé ?
76. Ss "fixed." [OWA]
77. T Very good! We place it here "fixed". [ESR] [PR]
78. T Donc, il me reste.. imaginez.. il me reste deux vides ... vous imaginez, 'يكون عندكم' un parking', 'vous avez, une voiture, et vous devez, 'يقولك' vous prenez les deux places sinon 'واللو'

79. Ss Laugh.
80. T “to be” is here. Il doit remplir les deux vides. ‘و هنا, il y a une histoire’. Vous suivez l’histoire. Et vous allez normalement comprendre. [L2]
81. T “Mr Be”, is someone who likes imitating. Comme vous les jeunes. Vous voyez un chanteur connu, il a mis une ‘منقوشة’ (Earing). Vous mettez une ‘منقوشة’. Il a mis une casquette « Guci », vous mettez une casquette « Guci »’. Il a laissé la barbe pousser...[Rule]
82. Ss S1 “assarwal yeqress di le genoux ...” [AnsL1] [EXE]
83. T Et bien il va la mettre la même chose. Très bien ! Donc. « To be » c’est la même chose. “to be” est un ‘ado’ qui veut suivre. Il va imiter qui?
84. Ss [SA]
85. T Le verbe « fix » d’acore ? Donc, il va zoomer sur « Fix ». [L2]
86. Ss Ah! [yes, in Berber] [OWA]
87. T Il va zoomer sur le verbe. « fix » est venu en deuxième position. Bt bien, lui aussi, il va venir en deuxième position. « to be » va se mettre ici (writing « to be » in the second part of the blank) il va voir la terminaison de « fix »est ce qu’il a une terminaison? [Rule]
88. Ss Non. [OWA]
89. T Très bien ! Alors, lui non plus, ‘ميديرش’ terminaison. « fix » a porter un chapeau de marque « will », lui aussi il va mettre le chapeau de marque « will ».
90. Ss Ah! (Surprised) [OWA]
91. T Là, j’ai travaillé bêtement sans avoir aucune connaissance en Anglais. Mais comme vous êtes des terminales vous êtes sensés avoir le minimum . Et arrivé ici, et on va cliquer des doigts et vous allez devenir intelligents!
92. Ss S1 Mrs ‘will be’! [IC]
93. T Ah! Très bien, excellent, very good! « It will be fixed by....»
94. Ss Them! [OWA]
95. T Very good! “It will be fixed by them.” [ESR]
96. Ss S2 On peut supprimer “by them”! [AnsL1]
97. T Yes! “by them” is not important! Very good.
98. T Let me give you another example.
99. Ss (chatting among themselves.)
- 100.T Right ! You follow, please, avant que ça ne sonne! [CM]
- 101.T Alors qu’est ce qu’on a dit? What is the step number one?

- 102.Ss Le sujet et l'objet! [AnsL1]
- 103.T "Aha-a!" (No in Kabyle)
- 104.Ss S2 The verb! [OWA]
- 105.T Where is the verb?
- 106.Ss S2 'are imitating'[OWA]
- 107.T This is the verb. (Underlining the verb on the board.) [GA]. Step two?
- 108.Ss Euh! [SA ]
- 109.T What can do a child or a grandma?
- 110.Ss Changer! [AnsL1][OWA]
- 111.T Yes, to change the order the subject and object.
- 112.T (To S3) Alors sa-y est ? Tu as bien assimilé? [CM]
- 113.Ss S3 Oui! [OWA]
- 114.T Très bien ! Formidable ! Tu viens nous faire la phrase. [Pointing to the board]
- 115.Ss S3 Huh !
- 116.T Puisque tu as très bien assimilé! Allez, viens ! [CM] [L2]
- 117.Ss S3 (hesitating to come to the board) [GA]
- 118.T 'ayyar?' pour quoi?[L1][L2]
- 119.Ss Mrs 'yetset-hi'! (He is shy)S
- 120.T Vous suivez! [CM]
- 121.T Allez, on continue This is my verb. What does this means? This means that what comes after is object and what comes before is...?
- 122.Ss Subject. [OWA]
- 123.T Alors, e commence "All sorts of products...." Je laisse un vide. "have.... Counterfeiters." [Exe]
- 124.T You had better follow you will have it in the test, this week. [CM]
- 125.T "All sorts of products ..... By counterfeiters." Now let's count. One, two... which means that we will have three. (Parts of the verb in the passive voice) Et qu'est-ce que nous avons dit? We start by the last part. You have to give the last part of the verb "imitate", "imiter"?
- 126.Ss Imitated. [OWA]
- 127.T Very good! "imitatED" and now begins the story of "Mr Be". 'Mr Be' is zooming\_\_\_\_
- 128.Ss \_\_\_\_on the verb.[IC]
- 129.T Ah! Alors, it is placed in the second part! But, what about the verb? Il a une 'منقوشة'.

- 130.Ss Laugh.
- 131.T What about this? (pointing at the verb written on the board)
- 132.T On se réveille! Hun ?! [CM] [L2]
- 133.T “All sorts of products are... “ est ce que c’est correct ?
- 134.Ss No! [OWA]
- 135.Ss S2 “ayyar?, c’est Are”.(‘Why’ in Kabyle) [AnsL1] [PeerCor]
- 136.T est ce que c’est correct ? “All products are..? (stressing the |s|sound at the end) “is, or us, or are?Choisi!
- 137.Ss S1 ‘is’ [OWA]
- 138.T What’s the difference between “is” and “are”?
- 139.Ss “is” for he, she, it! [IC]
- 140.T “is” is used with singular nouns. Here we have “products” au pluriel donc on élimine « is ». Donc, c’est « are ». “Products are being...” huh? C’est quoi ça? Huh! « Being »? ‘Za3ma’ c’est correct? Et ben oui c’est correct. [L2]
- 141.Ss S1 \_\_\_\_ ‘acu el-ma3nas, a madame, thura winna??’ [AnsL1] (“What does that mean madam?”)
- 142.T \_\_\_\_ Je m’explique, “...are being imitated by counterfeiters.” And this is Ok. « being » here, ça représente un temps. Nous avons utilisé le même temps, ici cela s’appelle “Present Continuous” et la phrase a la vois passive doit être au même temps. C’est bon ?
- 143.Ss Oui [Owa]
- 144.T All right, now you start writing. Take notes. And write the date. [CM]
- 145.Ss (Students copying down.) [GA]
- 146.T Tarik n’est pas venu aujourd’hui! Vous ne savez pas ce qu’il lui est arrivé? [PI]
- 147.Ss Non. [OWA]
- 148.T Est-ce que quelqu’un a son numéro ?[PI]
- 149.Ss S4 Manal, elle l’a ! [AnsL1]
- 150.Ss S5 Elle n’a que la moitié du numéro ! [Laugh] AnsL1]
- 151.T (Laugh!) Je n’ai jamais vu quelqu’un qui a juste le début du numéro! [PI]
- 152.T Allez, hurry ! Vite ! écrivez ! [CM]
- 153.T ...finished ? hurry !
154. Ss S3 “a madam, i melmi le test ??” [AnsL1]
- 155.T Mercredi..... ou Jeudi. [CM]

156.Ss S3 l'Après midi ??

157.T Oui. 'Shuuut!'

158. (Writing on the board) "The police ha... " comment est ce qu'on dit? The police,  
« has », or « have » ? selon vous comment on doit dire ? [Exe]

159.Ss S2 Mrs, the policeman has...[IC]

160.Ss S1 "have!" [OWA]

161.T Yes, way say "the policeman has...", or "the police woman has..." but when we say  
"the police" it is a group of policemen, so we say "the police have..." Très bien! Now,  
transform the sentence.

(The Bell rings.)

162.T Oh! (Disappointed)! Ok take down the two sentences. Nous allons la faire la  
prochaine séance! Vite!

**10.2. Lesson script 10 Lesson 10 Slave Trade**  
**Second year literature and philosophy Teacher (MSsB)**

2. Ss (Chatter.) (students not paying attention)
3. T Please take your books Shut! Please! [hand gesture] [CM]
4. T Please take your textbooks. Go to page 28.
5. T Today we will deal with the section reading and writing. You turn the page. I Will give you time to think about the exercise....
6. Ss (students taking their seats and taking out their textbooks.) [GA]
7. T Look at the picture and discuss the following questions.
8. T What is it about? What is the picture about?
9. Ss Mrs! [GA] (Raising hands, asking for permission to answer.)
10. Ss S1 Racism. [OWA]
11. T Racism? [ESR]
12. Ss No! [OWA]
13. T No? [ESR]
14. T What do you see in the picture?
15. Ss S1 Mrs! Slaves! [OWA]
16. T Slaves? [ESR] How do you know they are slaves?
17. Ss S2 Mrs! Which page?? [Ask]
18. T Page 48. [CM]
19. T Their hands are tied behind their backs. Look!
20. T So, where are they?
21. Ss In the boat. [OWA]
22. T Can you give me a synonym of 'Boaté'?
23. Ss S3 Ship! [OWA]
24. T "Ship" yes, [ESR] or we can say "The picture represents a ..."?
25. Ss [SA]
26. T We can say... " a slave ship", right?
27. Ss Yes! [OWA]
28. T Then, someone to write the first answers? [CM]
29. Ss S3 Mrs!! (Going to the board) [GA]
30. T Yes! (Accepting).
31. T So... the picture represents...?
32. Ss "a slave ship"! [IC]
33. T Are there any other words related to the word slave?

34. Ss [SA]
35. T “Slave”, what is the meaning of “slave”?
36. Ss “Slavery.” [OWA]
37. T (writing students’ answers on the board.) Slave, Slavery. [ESR] Do you know the history of slavery? how, the white man brought black people from south Africa\_\_\_
38. Ss S1 “To America.” [OWA]
39. T Yes, to the new word , to America.
40. Ss “العبيد تجارة” [AnsL1]
41. T All right! How do we call it in English?
42. Ss [SA]
43. T “Slave Trade”.
44. T (To the student writing on the board), “represents” by accentuating the |S| sound) “Third person”. Yes, “The slave ship”.... “ship”. Okay!
45. T The picture is, then, about the slave trade. The white man from Europe went to Africa, Ok? And brought black people first, to Asia then to the new world. (Drawing a simplified map of the sailing road that slave ships used to take.)
46. T And they brought with them...?
47. Ss “Black people.” [IC]
48. T What did they use to buy from India, China...? (Pointing at the map.)
49. Ss [SA]
50. T Spices! They used to buy spices. What is the meaning of “spices”?
51. Ss S3 “Les épices.” [AnsL1]
52. T Yes, there were more types and good quality spices. This is called “trade” ‘تجارة.’ [L1] They,also, used to buy from other places a lot goods and products. “Goods” is another word for products, food and a lot of things they used it in their daily life.[Def]
53. T The next question here do you think the boat is and where do you think it’s going? Where do you think it is?
54. Ss Water! [OWA]
55. T I just explained the slave trade, where are they? In which continent (Difficult to say from the picture they have to guess, to deduce not deduce to abduct the possible location of the ship according to what is explained.)
56. Ss S3 America. [OWA]
57. T Before America, before arriving to America, where do they stop first?
58. Ss [SA]
59. T Africa! South Africa. Black people where did they live?
60. Ss Africa.[OWA]
61. T When we say “black people” we’re talking about “race”, the different races in the world.

62. T How many races are there in the world?
63. Ss [SA]
64. T How many races?
65. Ss S2 Huh! Two?
66. T Uhum... we have the white, the black ...?
67. Ss S2 'Les rouges'! [OWA] [AnsL1]
68. T yes, the Indians.
69. Ss S1 Mrs, four! [OWA]
70. T And the yellow.
71. Ss S4 the orange [OWA] (humour)
72. Ss Laugh! [GA]
73. T All these are the different races. So, the ship then, in Africa, and it is going to? Where is it going?
74. Ss To America. [IC] (independent clause)
75. T To America! Yes! [ESR] [PR]
76. T Why do you think the Americans brought with them the black people?
77. Ss To make slaves. [IC]
78. T To make them slaves? [ESR]
79. Ss Yes!
80. Ss S2 To help them... [IC]
81. T to do their...?
82. Ss S2 Their life. [IC]
83. T To do their domestic work. Huh? House Work. Women used to work in houses and men used to work in the fields?
84. T "Used to" do you remember what the word "used to" means?
85. Ss Yes. [OWA]
86. T A habit in the past. "Used to" (writing it on the board.) do you remember?
87. Ss Ah! [GA]
88. T They used to work in the fields (while writing) so they worked in the agriculture in plantations. Ok?! They used to work in
89. Ss S2 Agriculture. [OWA]
90. T Question C we're going to complete all these answers. This is question number ... heh! Question "C" (reading from the text book.) these dates and personalities are important in the American history. What do you think is their importance. Read, first, read the first name.
91. Ss Abraham Lincoln.
92. T who was Abraham Lincoln?

93. Ss American president.
94. T Yes, in which year?
95. Ss 1861
96. T 61, and in 1865... Do you know what happened in this period of history? [ESP]
97. Ss [SA]
98. T What about the civil war?
99. Ss S1 war... الحرب! [OWA] [AnsL1]
100. Abraham Lincoln left a quotation I would like you to take it "a house divided cannot stand by." (reading as she write it on the board)
101. So, remember, from 1861-1865 there was the civil war in America. So what is the civil war?
102. Ss [SA]
103. T what is "a war" ?
104. Ss الحرب ! [AnsL1]
105. T And civil war?
106. Ss S2 الباردة الحرب
107. T that's the "Cold War."
108. Ss S1 Non ! la guerre civil!!
109. Ss S4 المدنية الحروب huh !.. الالهية ! Mrs, entre le people et ... le people. [AnsL1]
110. Ss S2 الشعب الشعب. [AnsL1]
111. T Let's write the right answer on the whiteboard.
112. T I think that the boa...?
113. Ss S2 I think je pense... [AnsL2]
114. T I think that the boat is in Africa. And it is going to... where is it going?
115. Ss America. [OWA]
116. T Yes, it is going TO America. Someone else to write? Where is the mistake here? Look at the word "ship" where is the mistake?
117. Ss S not C
118. T What is a ship again?
119. Ss a boat.
120. T Yes! [PR]
121. T Next! Martin Luther King.
122. Ss S2 He was a man of peace. [FSA]
123. T she is saying that Martin Luther King was a man of peace, what do you think?
124. Ss S3 madam il defend les noirs.
125. T yes, he led a movement to ..

126.Ss [SA]

127.T So what did he want? He wanted ....?

128.Ss Peace. [OWA]

129.T ... and rights. Do you remember we talked about duties and rights. He asked for the right of black people. 'The rights', 'les droits'. People, citizens have rights and duties.

130.T can you give me two examples about the rights of people?

131.T what are the rights of citizens in our country?

132.Ss [SA]

133.T the rights to ...? Let's talk about children's rights.

134.Ss Studies. [OWA]

135.T yes, education. The right to education. What else?

136.Ss Health [OWA]

137.T Yes, the right to health care! Education, health care, and ... shelter. Every citizen has the right to shelter, when we say shelter, we mean houses, a roof over their heads. What does shelter means in Arabic?

138.Ss [SA]

139.T المأوى [AnsL2] shelter (writing the word on the board and repeats the correct pronunciation [ʃ e l t ɜ].)

140.Ss S3 Mrs "le foyer". [AnsL2]

141.T Yes! Of course!

142.T So, Martin Luther King was the leader of a movement for the black's right, for the black's community. 'Une communauté', 'مجتمع'. 'community'. Or 'une société' in French.

143.T Let's finish with this task. Remember 'slave trade'. It is also called 'triangular trade'. The white man from Europe took black people from Africa and took them to Asia along with other goods and products.

144.T You sail by boat and you fly by...?

145.Ss Plane.

146.T (to the student writing on the board.) You underline "sail" 'We sail by boat and fly by air plan.'

147.T When you remember Abraham Lincoln you remember the American Civil War.

148.T we always write the first letter of people's name in capital. "A" and "L" incapital... was the US president during the period of the American Civil War. (reading from the board.)

149.T so Abraham Lincoln said that America must be ... what ? united. Ok?

150.T what about Mr Luther King?

151.Ss S2 he is the man who, was ... the civil rights movement. [FSA]

152.T I would like to remind you of the most important events in the world. What are they?

153.Ss [SA]

154.T WWI, WWII, there was also the cold war. And the American Civil War.

- 155.T It's important to take all these notions.
- 156.T Is there any mistake on the board? Is there any mistake? In terms of capitalization.
- 157.T look at it, "America Civil War"?
- 158.Ss AmariCAN Civil War.
- 159.T Good. What about capital letters?
160. Ss movement?
- 161.T Civil Rights. It's a movement. "War" capital letter, "Civil" capital letter. Do not forget this.
- 162.T One! He was one of the leaders of the Civil Right movement. You are this sentence in August pay attention ... remember that months have capital letters.
- 163.T (Reading while Writing on the board) Marting Luther King led a march of one thousand people on Washington DC to demand racial equality.
- 164.T What is "racial"? "racial" is the adjective of what noun?
- 165.Ss Race. [OWA]
- 166.T Yes, racial equality. He asked for equality between the white and the black.
- 167.T What about DC?
- 168.Ss S3 Mrs "ymout" deceased! [AnsL1]
- 169.Ss Laugh. [GA]
- 170.Ss S2 DC? Before Christ!
- 171.T That is BC! (amused) Washington DC.
- 172.T Alaska District! 'Découpage Administratif', in Arabic 'مقاطعة'. [L1] [L2]
- 173.T Ok ! Have you finished to write this, then read the newspaper below and answer the following questions. (Reading from the text book.) So, to check our answers for the previous question we need to read the page...
- 174.Ss S2 Page forty eight? [Ask]
- 175.T Yes, you read silently and you underline the difficult words. Take a pencil and underline them. And in the same time you check the previous answers.
- 176.Ss S2 Mrs! J'efface le tableau? [AnsL2]
- 177.T We're going to check! We need it.
- 178.Ss S2 Ah yes! Sorry. [FSA]
- 179.T Read silently. And underline, with a pencil the difficult words.
- 180.Ss (Executing. Some students chatter). [GA]
- 181.T You want to read? Ok (to S2)
- 182.Ss S2 (Reading the first paragraph.) [GA]
- 183.T Did you find the answer to the first question? Where is the sentence?
- 184.Ss S2 (reading from the text) ? [GA]
- 185.T So who can check the first answer? Who was Martin Luther King?

186.Ss Black American.

187.T Yes! (Reading from textbook) What is an “address”?

188.Ss Speech. [WA ]

189.T A speech, or a discourse. [ESR]

190.T Look at the words “great leader”.

191.T So, Martin Luther Kings was great leader of a movement against racism, add this to the answer.

192.T Yes, here... read and answer the first question.

193.T Martin Luther king was one of the leaders against...? Can you give me a synonym of racism?

194.Ss “Racist”, ‘Discrimination’. [AnsL2]

195.T “Discrimination” (Eng), “Difference”. Very good! And, you can add another word “segregation”. Like in French “la segregation” to make a difference between races...

196.T ...or between white and ...? [PR]

197.Ss By colour of the skin. [IC]

198.T Yes, segregation by the colour of the skin. Very good! One can make the difference between rich and poor. [PR]

(BELL RINGS)

199.T Ok read the entire newspaper article at home and answer the rest of the questions. And do not forget to look up the difficult words in the dictionary.

### 3- Results of Lesson Phases Analysis

By exploring the lesson procedure applied in EFL classes the type of learning activities and the nature of teacher-student interactions when performing different tasks can better be appreciated. This section provides a detailed analysis of the different types of lesson phases. Each phase has a specific goals and may contain a number of tasks.

Table **Lesson transcript 01 learning phases**

Lesson Stage	Learning Activities	Non-plenary phase	Notes (nature of the activity)	Lines in transcript
1.	Ice breaker The teacher initiates interaction and evaluates students level of comprehension		Give and take questions IRF pattern 1	[01- 15]
2.	the past passive is used to describe the damage of oil spill in the sea.	Activity One Page 60		Line 16
3.	Students performed the activity interactively together with the teacher.		Answer checking for activity one closed questions checking ( reading from the textbook)	[16- 31]
4.	Making sure the learners understand the ,necessary vocabulary before giving them some time to work on the activity on their own.		Give and take questions Comprehension IRF pattern 2 open questions answers checking	[32- 47]
5.	Instruction		Teacher presenting the activity open answer checking	[48- 63]
6.	A few minutes were left to students to form sentences in the future passive.	Activity two page 61		63
7.	After a few minutes of trying on their own learners are asked to correct the activity orally.		CLOSED Answer checking for activity two	[64- 79]

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ...

Table Lesson transcript 02 learning phases

stage	Plenary phase	Non-plenary phase	Notes (nature of the activity)	Lines in Transcript
01	Goal Introduction to the topic of the lesson. From percept to concept Make students interact about classroom context. Make students infer the topic of the lesson using closed-response questions Comprehension and reaction to oral and visual messages. Production of oral messages.		Close- response task Close- response Traditional IRF	[01-21]
02	Referring students to the textbook task. Comprehension of written messages.		Closed-response plenary checking	[21-40]
03	Building concepts (learning new vocabulary and language aspects)		Open-questions answers plenary checking. With embedded elements at the end Grammatical and lexical information And mini lectures (providing rules of language use)	[40-70]
04	Practice time Second textbook activity Checking students' new competence		Close-response questions checking	[71-93]
	<b>Lead in new task</b>		<b>Lead in new topic</b>	

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ...

Table Lesson transcript 03 learning phases

Lesson Stage	Learning activities	Non-plenary phase	Notes (nature of the activity)	Lines in transcript
1.		Pre-Plenary talk.		[01-07]
2.	Open response checking leading to new vocabulary acquisition		Open response checking	[07-17]
3.				Repetitive style ?
4.				Check
5.				Suggestive question.
6.	open response checking leading to concept comprehension.		open response checking	[17-48]
7.				Suggestive use of verbs.
8.				Instruction
9.	plenary instructions (task explanation)		plenary instructions	[49-51]
10.				Confirmation question
11.	closed response checking for vocabulary comprehension checking		closed response checking	[51-63]
12.				Introducing new vocabulary (after short explanation ?)
13.	closed response checking activity one correction.		closed response checking	[64-82]
14.				Introducing new vocabulary (naming the task ahead.)
15.				Introducing new vocabulary.
16.	activity two information about the context of the press release (flexible IRF (student initiated participation asking questions))		Open response checking	[83-100]
17.				Role play like activity.
18.	Plenary instructions		Plenary instructions	[102-103]
19.		non plenary group work.	group work	[104-105]
20.				Mini lecture.
21.	(reminding of speech characteristics to serve current purpose.)		open response checking	[106-118]

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ...

Table Lesson transcript 04 learning phases

stage	Plenary phase	Non-plenary phase	Notes (nature of the activity)	Lines in transcript
<u>1</u>	Introduction ice breaker Introducing the topic and prompting learners to interact in the target language Also, teacher is measuring learners' information about the topic as well as the degree of understanding of the questions. topic One (proofs of eating habits change in Algerian society first factor life style changes)		Teacher initiated (teacher-student interaction) in the form of relaxed IRF  Open-questions checking	[01 _18]
<u>2</u>	Discussing the question of other factors that caused Algerians' eating habits to change. (Advertising as a cause.)		Teacher initiated (teacher-student interaction) in the form of relaxed IRF Open answers checking.	[19-34]
<u>3</u>	Working on the activity, whose aim, is to write a short newspaper article about the causes and effects of the Algerian eating habits change) Using the ideas discussed with students earlier to supervise them on the board.)			[35- 50]
<u>4</u>	Teacher gives instructions to discuss in pairs the content of the hand-outs she just handed them.		Instruction	51
<u>5</u>		Pair work students quietly study the handout and discuss its content.		52
<u>6</u>	Negotiating the meaning of the cartoon strip shown on the hand-out. (The teacher trying to draw the right answer from students.		Open questions checking	[53- 74]
<u>7</u>			Interaction using learning support –the hand-out-	[75-81]
<u>8</u>	Comprehension of visual and linguistic learning support		IRF –open-questions-checking.	[82-92]
<u>9</u>	Lead in (explaining a new concept “irony”) Concept building using visual and linguistic signs.		Modified IRF (open-questions checking. And concept explanation	[93-98]
<u>10</u>	Summarizing –giving instruction on how to divide the essay into two parts.		no interaction (teacher discourse)	99
<u>11</u>			IRF (open-questions checking. And concept explanation	[100- 107 ]
<u>12</u>			Modified IRF open-questions checking (Ideas generation –brain	[108-111]

			storming)	
<b>13</b>	Discussing negative consequences of changing eating habits.		Student initiated interaction. And teacher trying to understand more!	[112- 118 ]
<b>14</b>	Teacher explaining the activity at hand and giving instruction about the homework.		Instruction	[119- 121]
<b>15</b>	Teacher asking open question – asking learners to give their own truthful opinion. And they are stuck! It is most likely that they understood the question; student sitting close to me, and he whispered that the cartoon shows that obese people eat a lot of junk food. Basicallyn he got the idea. But he couldn't or wouldn't know how to say it in English. So most students stayed silent and shortly after the teacher give her own point of view and involved student with the last (emphatic) question. Closing the session with a truly human advice.		Lead in – critical thinking Deep analysis	[122- 128]

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ...

Table Lesson transcript 05 learning phases

Stage	Plenary Phase	Notes (Nature Of The Activity)	Lines In Transcript
<u>1</u>	Introduction Ice Breaker Introducing The Topic And Prompting Learners To Interact In The Target Language.	Teacher Open-Questions Checking Open Response Chercking	[01 _05]
	Discussion	P C R Ch Plenary Closed Response Chercking	[06 - 18]
	Discussion application	P C R Ch Closed Response Chercking	[19 -32]
		P O R Ch Closed Response Chercking	[33- 43]
	Lead in introducing the rule	Mini Lecture	37 44
	Plenary Phase Practice	Closed Response Chercking	[45- 51]
		Student Spontaneous Participation Lead in	[52-56]
		(Out Of Irf)	52
		(Back To Irf)	56
		Closed Response Chercking	[57-70]
		Plenary Instructions For Application	[71-75]
		Closed Response Checking Of Application	[76-84]

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ...

Table Lesson transcript 06 learning phases

stage	Plenary phase	Notes (nature of the activity)	Lines in transcript
<u>1</u>	Second part of the lesson Correction of the first activity (task) Closed-response checking To check learners' ability to express obligation and prohibition correctly in the right context (checking the actual use of the language structures studied before)	Plenary closed-response task checking traditional IRF	[01-15]
<u>2</u>	Pointing at the charter and explaining its use. And instructing students to write a rights charter following the diagram as guide.	Plenary Instruction New task; use of a diagram from textbook	[16-17]
<u>3</u>		GROUP WORK teacher help.	[18-20]
<u>4</u>		Plenary open response checking	[21-25]
<u>5</u>	Spontaneous students participation (out of IRF) At the end teacher brought the attention back to the task and took the discussion (into IRF) again.	Students initiated Plenary Lead in (to different topic)	[26-34]
<u>6</u>	Task correction	Plenary closed response checking	[35-46]
<u>7</u>	Teacher clarifies the task instruction	Plenary Instruction	37
<u>8</u>	Grammar point- writing tips	Plenary Instruction – lead in	47
<u>9</u>		Plenary closed response checking	[48-52]
<u>10</u>	Learning strategies advice	Lead in	[53-54]

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ...

Table Lesson transcript 07 learning phases

stage	Non-plenary phase	Notes (nature of the activity)	Lines in transcript
1	Pre-plenary phase introduction to the lesson Reminder of previous information.		[01-02]
2		Plenary closed response checking	[03-12]
3	Pre-plenary phase Classroom management		[13-14]
4		Plenary closed response checking	[15-24]
5	Non-Plenary classroom management		21
6		Out of IRF	[25-26]
7		Back to IRF Open response checking	[27-53]
8		Reminder of a metaphor that refers to a rule.	[44-46]
9		Plenary closed response checking	[54-85]
10		Mini lecture Plenary lead in phase	[86-87]
11		Plenary closed response checking	[88-93]
12		Plenary Lead in to new topic	94
13		Plenary closed response checking	[95-99]
14		Plenary open response checking	[100-103]
15		Plenary closed response checking	[104-108]
16		Lead in out of IRF (Humour)	[109- 118]
17		Plenary closed response checking (for explanation urpose.	[119-124]
18		Mini lecture	125
19		Plenary closed response checking	[126-129]
20		Plenary closed response checking Inferring a rule using a metaphor reminder.	[130-135]
21		Plenary closed response checking.	[136-143]
22		Plenary Open response checking	[144-155]
23	Non plenary out of IRF	Classroom management trying to get back to IRF	146
24	Interruption out of IRF		[152-155]
25		Open Question trying to get back to IRF	156
26	Student initiated conversation  Non-plenary		[157-161]
27		Plenary open response checking	[162-175]
28	Non plenary phase	Pedagogical planning	[176-183]
29		Final plenary closed response checking.	[184-187]

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ..

**Table Lesson transcript 08 learning phases**

stage	Non-plenary phase	Notes (nature of the activity)	Lines in transcript
1	Pre-plenary phase introduction to the lesson Reminder of previous information.		[01-02]
2		Plenary closed response checking	[03-12]
3	Pre-plenary phase Classroom management		[13-14]
4		Plenary closed response checking	[15-24]
5	Non-Plenary classroom management		21
6		Out of IRF	[25-26]
7		Back to IRF Open response checking	[27-53]
8		Reminder of a metaphor that refers to a rule.	[44-46]
9		Plenary closed response checking	[54-85]
10		Mini lecture Plenary lead in phase	[86-87]
11		Plenary closed response checking	[88-93]
12		Plenary Lead in to new topic	94
13		Plenary closed response checking	[95-99]
14		Plenary open response checking	[100-103]
15		Plenary closed response checking	[104-108]
16		Lead in out of IRF (Humour)	[109- 118]
17		Plenary closed response checking (for explanation urpose.	[119-124]
18		Mini lecture	125
19		Plenary closed response checking	[126-129]
20		Plenary closed response checking Inferring a rule using a metaphor reminder.	[130-135]
21		Plenary closed response checking.	[136-143]
22		Plenary Open response checking	[144-155]
23	Non plenary out of IRF	Classroom management trying to get back to IRF	146
24	Interruption out of IRF		[152-155]
25		Open Question trying to get back to IRF	156
26	Student initiated conversation  Non-plenary		[157-161]
27		Plenary open response checking	[162-175]
28	Non plenary phase	Pedagogical planning	[176-183]
29		Final plenary closed response checking.	[184-187]

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ...

Table Lesson transcript 09 learning phases

stage	Plenary phase	Non-plenary phase	Notes (nature of the activity)	Lines in transcript
1		Pre-plenary catching students attention		01
2	Plenary open response checking. Ends with mini lecture		open response checking.	[02-23]
3			Rule	[21-23]
4	Plenary Open response checking		Plenary Open response checking	[24-40]
5		Classroom management Trying to center Students attention to the lesson again.		32
6			Mini lecture (grammar rule)	40
7	Open response checking		Open response checking	[40-98]
		Non-plenary classroom management		[99-100]
	Application of previous rule with teacher's help.			[101-111]
		Non plenary classroom management		[112-120]
	en response checking		Open response checking	[121-138]
		Non plenary classroom management		124
		Non plenary classroom management		132
	Student initiated conversation. (out of IRF)		Open response checking	[139-141]
		Non plenary management	Pedagogical planning time interpersonal conversation.	[142-156]
			Open response checking	[158-161 ]

Source Appendix two, Transcripts of the audio-recorded EFL classes, page ...

Table **Lesson transcript 10 learning phases**

<b>Lesson Stages</b>	<b>Learning Activity</b>	<b>Plenary phase</b>	<b>Lines in transcript</b>
1		pre-plenary phase. Getting students to listen.	[01-03]
2	Instructing Learners On Task	instruction.	04
3	Instructing Learners On Task	plenary instruction about task	[05-07]
4	(Teaching Ss how to answer in a Full Sentence.)	out of IRF instruction.	[17-18]
6	Instructing Learners to go to the board.	(Out of IRF) classroom instruction.	[27-28]
7		(answering her own question)	42
8	(activity correction) for comprehension,	closed response checking (activity correction) for comprehension,	[30-42]
9	(Dictating spelling tips.)	instructions	43
0	summary iconic sign 'a drawing of a map.'	mini-lecture	44
11	explanation With mini-lecture at the end.	Plenary open response checking.	[46-51]
12	definition and new vocabulary introduction	Plenary explanation	51
13	Collaborating task performance with various external information.	Plenary open response checking.	[52-88]
14	Introducing new task.	Plenary instructions	89
15	(Task correcting.)	Plenary closed response checking	[90-94]
16		instruction.	110
17	Additional information and vocabulary introduction.	Plenary open response checking	[95-110]
18		Lead in grammar tips.	[115-116]

19		vocabulary checking;	125
20	introduction of new vocabulary.	'lead in' Mini-lecture	138
21	(collective task correction )	Open response checking	[117-141]
22	introduction of new vocabulary.	'lead in' Mini-lecture	[141-142]
23	summary reminder mini lecture.	'lead in' Mini-lecture	150
24	Revising general culture basic information	plenary open response checking..	[143-154]
25	Reminding some spelling rules.	Lead in mini lecture	161
27	Plenary open response checking	Plenary open response checking	[155-162]
28	plenary open response checking,	plenary open response checking,	[163-171]
29	plenary instruction .	plenary instruction .	172
30	plenary instruction .	plenary instruction .	174
31	student initiated conversation	Plenary open response checking	[169-177]
32		Non-plenary phase (Out of IRF)	[178-183]
33		plenary closed response checking.	[184-190]
34		task instruction	191
35	introducing new vocabulary.	mini-lecture	194
36		open response checking.	[195-197]
37	homework.	Last plenary instruction	198

Source Appendix two, Transcripts of the audio-recorded EFL classes.

## 4- Visual textbook materials

### Textbook material 1- Writing Activity Writing a Press Release- Lessons 1 and 3

#### Write it right

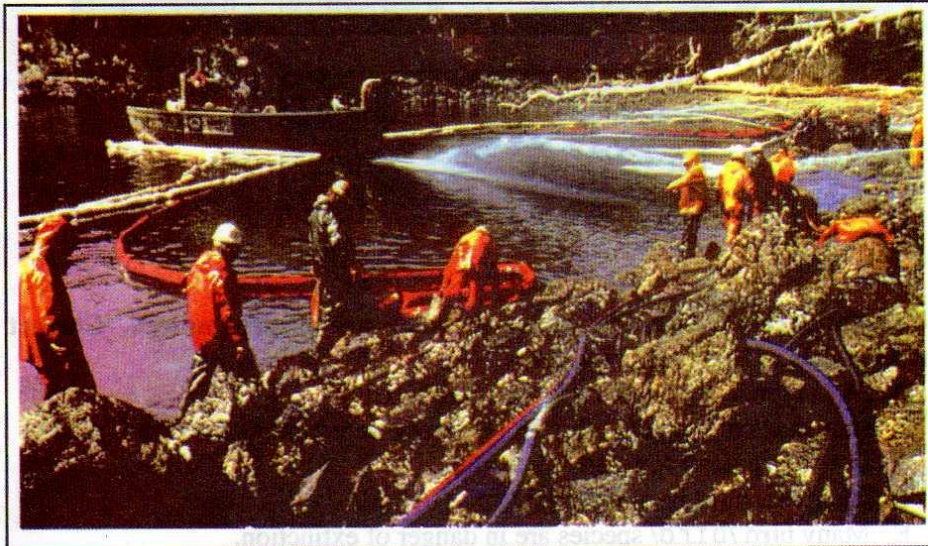
Right after the Exxon Valdez catastrophe, the owner of the shipping company made a press release to apologise for the damage and to promise reparation.

**Re-write the press release using the secretary's notes in the box below and the future passive. You can add sentences of your own.**

- 2 000 workers/recruit/ soon
- oil /recuperate with special machines
- beaches/clean/
- birds/wash out
- marine life/ restore
- tourist industry/compensate /for its losses
- hotel workers/employ/ by the company ...

#### Press Release

We make our sincere apologies for the damage caused by the wreck of the Exxon Valdez yesterday. We promise that \_\_\_\_\_.



## Textbook material 2 – Reminders et activities - Lesson 02 Quantifiers/ Practice

## STOP AND CONSIDER

- Read the information in Reminder IV below. Then do exercise 1 that follows.

## REMINDER IV

When you want to say that a big quantity of matter exists, begin the sentence with:

**There is ...**

**Example:** **There is** a lot of/plenty of/much/ water on earth.

When you want to describe this quantity of matter, you use quantifiers, such as: none of... < a little of ... < some of ... < most of ... < all of ...

- 1 Rewrite the paragraph below by replacing each of the underlined expressions with its corresponding quantifier from the Reminder above.

It is true that there is a lot of water on earth. However, we cannot use 100 % of it because 97 % of it is salt-water stored in oceans. Only 3 % of the earth's water is fresh water. 30 % of the fresh water is used for our daily needs and 30 % of it is used for irrigation. If we continue to pollute our water sources, there will soon be no water left for drinking.

- Read Reminder V below. Then do the exercise 2 that follows.

## REMINDER V

When you want to say that a total number of people or things in a group exist, begin the sentence with: **There are ...**

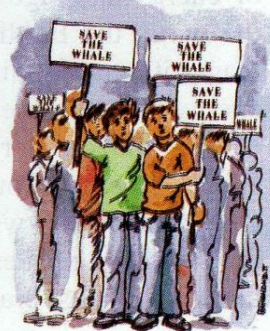
**Example:** There are 80 demonstrators in the street.

When you describe or subdivide the group of people or things, you use quantifiers:

All of them... > most of > half of > some/a few of > none of

- 2 Rewrite the paragraph below using quantity words instead of the underlined items.

There are about 80 animal activists in front of the embassy. 40 of them are women and the other 40 are men. 60 of them wear ghoulish masks and shout "stop killing the whales". About 10 of them have chained themselves to the gates of the embassy. 12 of them have managed to break into the embassy and give a petition to the Ambassador who has promised to transmit it to the higher authorities of his country. All is well that ends well. No demonstrator was injured during the fight with the police.




**Textbook material 3- Magazine Article Diagram- Lesson 04 – Practice 1**

① Go through the causes and effects listed below and add other ideas of your own.

**Reasons/Causes**

- industries polluting the soil with chemicals/ too much toxic waste thrown into rivers / too many oil spills/ farmers using too many insecticide sprays ... (§1)
- too many additives (preservatives, flavourings, colourings) using too much salt/sugar/ to sweeten the food ... (§2)
- too few people preparing their own meals/ too many people eating in fast food restaurants/ fast food containing too much fat (§3)

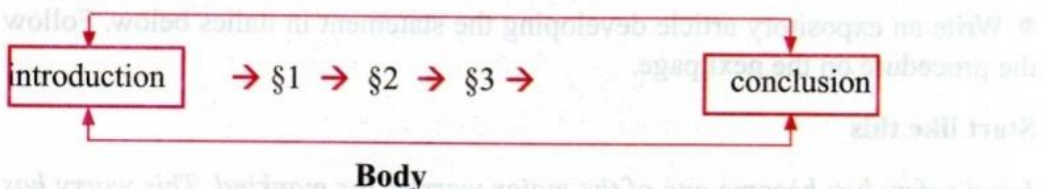
because, owing to, for, since, as, due to  as a result, so, consequently

**Results /effects**

- poisoning of water sources/ too little water to drink/ fruits and vegetables containing insecticide and chemical residues destruction of aquatic life ... (§1)
- children becoming hyperactive/lacking concentration at school/ people developing allergies/ suffering from food poisoning ... (§2)
- putting on weight/ developing diseases ... (§3)

② Select the ideas you think are relevant to the topic.

③ Write a first draft of your newspaper article. Organise it according to the diagram below. In your conclusion, try to suggest a solution to the problem.



④ Revise your essay and pass it to your partner for error checking.

⑤ Join a group and discuss how you can further improve your article.

Figure 82 Textbook 3 page 120

Teaching material 9 Writing Article on Changing Eating Habits Lesson 04- Practice 2

# BRAINSTORMING

**To eat or not to eat...**

1. First, read the two following definitions.

**JUNK FOOD:** food that is poor in nutritional value, often highly processed (*très élaboré*) or ready-prepared, and eaten instead of or in addition to well-balanced (*équilibré*) meals.

**GENETIC ENGINEERING:** insertion of a gene or genes from one species [*'spi:ʃi:z*] to another species; products developed by biotechnology are described as “genetically engineered” or “genetically modified” (cf. GM food).

2. a. Look at the cartoon and describe the two people. What kind of food are they eating?  
 b. How did you react to the cartoon?  
 c. What is the cartoonist's goal?

NICK ANDERSON  
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**Toolbox**

**Nouns:** couch potato [*ˈkɑʊtʃ pə'tetəʊ*] *personne qui passe son temps devant la télé* • bubble *bulle* • belly *ventre* • health [*helθ*] *santé* • takeaway food *à emporter* • vitamin deficiency [*dɪ'fɪʃənsɪ*] *carence* • appetizer [*ˌæpɪ'taɪzə*] *amuse-gueule*, starters *hors-d'oeuvre*, main course *plat*, dessert [*dɪ'zɜ:t*] = *sweet*.

**Adjectives:** obese [*əʊ'bi:z*] = *overweight*, shapeless *informe*, atrophied [*ˌætrə'fi:d*] • ready-cook-ed (dishes) •

tasty = *savory* [*ˈseɪvəri*] ≠ *tasteless*, spicy *épicé*, sugary [*'ʃʊɡəri*] • greedy *gourmand* • time-savvy • fattening *qui fait grossir*, healthy ≠ *unhealthy*.

**Verbs:** be lounging [*ˈlaʊndʒɪŋ*] *être affalé* • swallow *avaler*, stuff oneself with *se gaver de*, gulp down *engloutir*, nibble *grignoter* • put on ≠ *lose weight* *prendre* ≠ *perdre du poids*, be on a diet [*ˈdaɪət*] *être au / suivre un régime* • take a stand *prendre position*, feel concerned • embody = *exemplify*.

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Figure 83 Handout Lesson 04 Changing Eating Habits

Textbook material 4- Phonetic Practice (1) Marking intonation -Lesson 5

**SAY IT LOUD AND CLEAR**

1 Listen to your teacher reading the text below and mark the intonation on the words in bold type with appropriate arrows. ( ↗ or ↘ )

There are five types of alternative **energies**: **solar**, **wind**, **biomass** and **hydroelectric** energies. All of them can be produced in our country because we have the following natural **resources**: the **wind**, the **sun**, the **mountains** ...

However, solar energy is by far the most **viable**. It is **cheaper**, **safer** and less **polluting**. SONELGAZ has already built power plants in **Biskra**, **Djelfa**, **Hassi Rmel** and other localities in the South of **Algeria**.

2 Class work. Consider the consonant and vowel sounds in the boxes and answer the following questions.

A. Which ones don't you have in your own language?

B. Which ones aren't easy for you to pronounce? Give examples to illustrate and discuss.

p	t	k	f	s	θ	ʃ	tʃ
b	d	g	v	z	ð	ʒ	dʒ
h	l	r	ʍ	m	n̄	ŋ	j

ə	i:	u:	ʊ
ɪ	ɛ:	ɔ:	ɒ
e	æ	ɑ:	ʌ

3 The underlined letters in the words below are mispronounced. Correct the mistakes in the transcriptions.

A. He put the letter /li:tər/ in the mail box.

B. Thousands of beautiful /bu:tɪfʊl/ trees were burned /bərned/ down.

C. They were /weər/ saved /seɪvəd/.

D. The rivers have been polluted /pɒljʊ:təd/.

E. Many bird /bɪrd/ species are in danger of extinction.

F. The car has been washed /wɒtʃəd/.

Figure 84- Textbook activity- page 64

**Textbook material 5 Writing Practice 3 Class Charter- Lesson 06 obligation/prohibition**

**3 Class work. Distinguish between the duties and rights in the box. Then complete the class charter that follows. Discuss and add other items to the charter.**

Express opinions/ work hard/ respect the opinions of others/ meet together to exchange ideas/ free education/ tolerate differences/ good working conditions/health care/ respect the rights of others/ promote a culture of peace/ information/ co-operate to solve problems ....

**COLONEL LOTFI SECONDARY SCHOOL, MASCARA  
LITERARY STREAM, YEAR 2 - STUDENT GOVERNING BODY  
CLASS CHARTER**

We, the undersigned, after class discussion and referendum, have agreed on the following:

Article One: Rights

- A. Children have the right to \_\_\_\_\_.
- B. Children have the right to \_\_\_\_\_.
- C. The school authorities must/mustn't/ \_\_\_\_\_.
- D. \_\_\_\_\_.
- E. The Parent-Teacher Association must/mustn't \_\_\_\_\_.

Article Two: Duties and Responsibilities

- A. We have the duty to \_\_\_\_\_.
- B. We must/mustn't \_\_\_\_\_.
- C. We shall \_\_\_\_\_.
- D. \_\_\_\_\_.

The present charter shall come into force and vigour as soon as it is deposited with the headmaster.

Date: \_\_\_\_\_ Signatures \_\_\_\_\_

Figure 85 Textbook Activity -page 47

## Teaching material 6 Text comprehension Pollution and global warming - Lesson 07

<b>I - PART ONE: READING</b>	<b>(15 PTS)</b>
<b>A- Comprehension:</b>	<b>(8pts)</b>
<b>Read the text then do the activities.</b>	
Smog hanging over cities is the most familiar and obvious form of air pollution. But there are different kinds of pollution—some visible, some invisible—that contribute to global warming.	
Carbon dioxide, a greenhouse gas, is the main pollutant that is warming Earth. Chlorofluorocarbon (CFCs), which is used in refrigerants and aerosol propellants, has a deteriorating effect on Earth's ozone layer. Another pollutant associated with climate change is sulfur dioxide known primarily as a cause of acid rain. But <u>it</u> also reflects light when released in the atmosphere, which keeps sunlight out and causes Earth to cool. Volcanic eruptions can emit massive amounts of sulfur dioxide into the atmosphere, sometimes causing cooling <u>which</u> lasts for years. In fact, volcanoes used to be the main source of atmospheric sulfur dioxide; today people are.	
Most people agree that to reduce global warming, a variety of measures need to be taken. On a personal level, driving and flying less, recycling, and conservation reduces the amount of carbon dioxide a person is responsible for putting into the atmosphere. On a larger scale, governments are taking measures to limit emissions of carbon dioxide and other greenhouse gases. One way is through the Kyoto Protocol, an agreement between countries that <u>they</u> will cut back on carbon dioxide emissions. Another method is to put taxes on carbon emissions or higher taxes on gasoline, so that people and companies will have greater incentives to conserve energy and pollute less.	

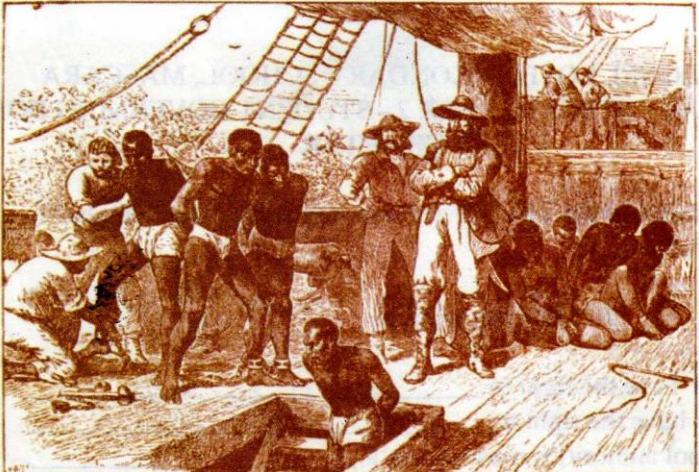
Figure 86 Text Comperhention Material (Hadout) - Lesson 07

Textbook Material 10 reading and writing section- activity (1)-Lesson 10- practice 1

**READING AND WRITING**

1 Look at the picture and discuss the following questions.

- What does the picture represent?
- Where do you think the boat is and where is it going?
- These dates and personalities are important in American history. Why?  
*Abraham Lincoln: 1861- 1865.*  
*Martin Luther King Jr: August 1963.*



2 Read the newspaper article below and answer the following questions.

- Who was Martin Luther King?
- What were his hopes and wishes ? Start your answer like this:  
*He hoped/wished/expected his children to \_\_\_\_\_.*
- Martin Luther King's address in the article was written in an oratorical style. What are the characteristics of this style, and why did he use it? Discuss.
- Did you like reading the part of Martin Luther King's address reproduced in the article. Why?

**Martin Luther King, The Man of Peace**

*Black Americans can do a lot of things that their parents could not do years ago because of racism. They can vote; they can eat in any restaurant they like; and their children can go to the same schools as white children. As we prepare ourselves to celebrate Martin Luther King Day next Monday, we'll reproduce a part of King's address **I Have a Dream** in memory of this great leader who was able to combat racism and hatred with non-violence and love.*

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Figure 87 Textbook page 48

## Textbook material 11 reading and writing section- activity (2)-Lesson 10- Practice 2

I have a dream that one day on the red hills of Georgia the sons of former slaves and the sons of former slave owners will be able to sit down together at a table of brotherhood. I have a dream that my four children will one day live in a nation where they will not be judged by the colour of their skin but by the content of their character. I have a dream today. I have a dream that one day little black boys and black girls will be able to join hands with little white boys and white girls and walk together as sisters and brothers.

When we let freedom ring, when we let it from every village, from every state and every city, we will be able to speed up that day when all God's children, black men and white men will be able to join hands and sing in the words of the old Negro spiritual, "Free at last ! free at last! Thank God Almighty, we are free at last!"

**2** Read the dictionary entries in bold. Then identify the meanings of the words as they are used in the newspaper article above.

**Address** /ə'dres/ n. 1. details of where a person may be found and where letters may be sent. eg., *What's your home/business address?* 2. Speech or talk to an audience. 3. (old use) manner or behaviour.

**Can 1** /kæn/ n. 1. metal container, usually with a lid for liquids. e.g., milk can. 2. vt preserve food by putting in a can which is hermetically sealed. e.g., *canned fish*.

**Can 2.** /kən; strong form/kæn/ (neg. cannot /kænət/ or can't /kɑnt/ pt. Could /kəd/ strong form /kʊd/ neg. couldn't /kʊdnt/ 1. aux. Indicates ability or capacity to do something. E.g., *Can you lift this box?* 2. Indicates permission. (Could is used for past time). e.g., *You can't smoke in the classroom.*

**Spiritual:** /'spɪrɪtʃʊəl/adj. 1. of the spirit or soul; of religion, not of material things. e.g., *He's concerned with spiritual things.* 2. of the church: *Lords Spiritual* 3. n. religious song as sung by Negroes in the United states.


**TIP BOX**

The makers of a dictionary try to offer all the usual meanings for every word they list. It is up to you to choose which meaning you need. To find the meaning you want easily, you should first look at the category of the word as it is used in your text (Is it a noun, a verb, an adjective or an adverb?).

Choose a word from the newspaper article above and write a dictionary entry for it.

Figure 88 Textbook page 49- Section Working with Words.