IMPACT OF VISUAL BASED PROSODY TRAINING ON LISTENING MICRO-SKILLS

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RESUMEN ANALITICO ESTRUCTURADO

Title: IMPACT OF VISUAL BASED PROSODY TRAINING ON LISTENING MICRO-SKILLS

Author: RAUL ALFONSO ERAZO AVENDAÑO

Key Terms:

Language Prosody: Boutsen (2003) has described Prosody as a tool of human expression that is transmitted acoustically by using durational, intensity, and frequency cues. He also stated that prosody serves to support the communication of linguistic and paralinguistic information, such as emotional and attitudinal features, in a manner that is efficient and appropriate.

Phonological Awareness: According to Torgesen (1999), Phonological Awareness can be defined as the ability to notice, think about and manipulate individual sounds from speech, that includes abilities such as phoneme blending, sound comparison, phoneme segmentation, among others, as a first upturn in the process of the aural perceptive skill.

Listening Micro-skills: Richards (1983), outlined a comprehensive taxonomy of the listening skill, which he called, aural skills taxonomy, twenty-four years later, Brown (2007), proposed a simplified version.

Visual Feedback: The use graphic representation of speech utterances to stimulate learning, its usage in the field of language instruction has been limited to language therapy correction.

Description

Fostering the listening skill in English language learners has been directly approached to the development of strategies for enhancing listening comprehension. However, even embracing such receptive skill in class, language educators have paid scant regard to the development of listening micro-skills needed to enable genuine communication. As Ylinen (2010) contends, the correct comprehension of foreign language speech requires an adequate recognition of the speech sounds. With this in mind, this study sought to determine to what extent visual based training in prosody of the language would facilitate learners' listening micro-skills development. This research involved 29 pre-service English language teachers from a public university who were enrolled in the Phonetics and Phonology course. In-class instruction and outside class activities were implemented by entailing the use of the acoustic analysis software visual feedback.

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Content

CHAPTER 1. Theoretical Framework.

This chapter reviews the literature relevant to the investigation and concerning to the nature of the research problem and the hypothesis. In essence, the purpose of this present study is to examine to what extent the use of visual feedback from acoustic utterances could help raising phonological awareness in the context of English language teaching, regarding the reality depicted by the students enrolled in the fourth semester at the English Language Program of the University of Amazonia

CHAPTER 2. Methods and Procedures

This chapter completely covers the experimental part of the study. It is structured around six leading points: first, the aspects related directly to the design of the study, secondly, the research variables evinced for the purpose of the investigation, thirdly, the description of the participants of the study, fourthly, a depiction of the settings of the study, fifthly, the instrumentation used for the data collection stage, and finally the procedure followed throughout the experiment.

CHAPTER 3. Conclusions

This chapter deals with the conclusions to which the researcher has come as the result of the data analysis; and also, with the ones discerned along the unfoldment of the phases of this study. In essence, the current study directly addressed the role of real time visual feedback of Acoustic Analysis Software on the development of a set of listening micro-skills (stress, rhythm, and intonation) grouped as phonological awareness. It also deals with some remarks about teaching listening and indicates some suggestions and recommendations for further research.

Through the development of this study, it was evident the relevance to understand the complex processes involved in the attainment of the listening skill of a foreign language and, therefore, the significance of finding teaching strategies which bring scaffolding to such particular issue. Thence, the pressing need to understand listening as a skill, which comprises both the comprehension and the decoding of a message; and also to provide a more active role to this perceptive skill in current classroom practices.

RAE elaborado el 23 de Julio de 2014

INTRODUCTION

Today, more than ever, individuals stand in need of developing the ability of communicating in a language different from their mother tongue. Such demand stems from current society entreaties related to the globalization phenomenon. In particular, the integration of academic, cultural and economic matters is a world-ranging pivotal point where new Englishes and varieties have expanded and positioned considerably worldwide. Accordingly, in recent years the English language learning and teaching processes have become essential issues for educational policies as an endeavour to fend for national growth in most countries.

Expanding on English language learning and teaching insights all over the world, Burns and Richards (2009) elucidate that two traditional strands have been naturally assumed to operate as a language teacher educator. The first strand focused on classroom teaching skills and pedagogic issues, and the second one focused on academic underpinnings of classroom skills. In fact, they state that the relationship between such strands has created a great deal of concern among the teaching community. In particular, the aforesaid assumptions on language knowledge how and on language knowledge about respectively, differ widely on teachers' widespread practice. The former related to pedagogical content knowledge and practical knowledge, and the latter to implicit knowledge (principles, practitioner knowledge, personal theories, among others.) where language teachers have followed different paths and perspectives.

The aforementioned overview regards basically on threads that lean towards the scope of learners' effective performance; however, language classroom reality displays a dissimilar effect. As a matter of fact, Lange and Wagner (1991) denote that before weighing teachers' effectiveness of delivery (language knowledge how), teacher's proceeding should be pointed out rightly to the construction of new knowledge and theory from participating in particular contexts, and engaging in specific types of activities. In this manner, language educators could envisage the nature of teaching understanding and practices to boost substantially the nature of language learning.

There is strong commitment of fostering Colombian foreign language teaching policies and language learning reality as well. Such assumption entails modes of promoting fitted foreign language instruction bearing in mind the nature of language learning; especially, if we take cognizance of the recent results obtained from the Government evaluation from the Ministerio de educacion Nacional (2012)

applied to in-service teachers in charge of the English subject in schools, which show that nearly 40% of them are below A2 level in accordance with the Common European Framework of Reference for Languages (CEFR). This matter has raised so far, especially during the last decade, an urgent need of improving the level of pre-service English teachers as one of the target points that the Ministry of Education has put forth in the development of “Programa de Fortalecimiento de Competencias en Lengua Extranjera - PFDCLE”, former “Plan Nacional de Bilingüismo 2004-2019”.

In fact, “Ley 115 de 1994” states the acquisition of at least one foreign language in basic and high schools, which demands befitting in-service language professionals. It is in this way that the PDFCLE pursues such official standard by setting the roadmap of different projects for succeeding in attaining a bilingual society. Both “El proyecto de fortalecimiento de Licenciaturas de Inglés” and “Red para el Fortalecimiento de Currículos de Programas Académicos de IES, diferentes a Licenciatura en Idiomas que ofrecen Cursos de Lengua Extranjera”, are two leading projects borne in mind to promote effective language professionals who foster a prominent language education in Colombia. All in all, Government strategies aim to endorse and point out to the scaffolding of the English language development throughout qualified professionals’ praxis to strive internationally.

Adjusting the aforementioned assertion to Florencia City, the English Language Program (ELP) of the University of Amazonia, a 32-year-old state-run institution located in Caquetá, in southeast Colombia, has an important role in the short time development of the Government policies as the only State University in the region. Subsequently, offering the sole formal academic program, the ELP has an uttermost commitment to training competent pre-service English language teachers. Otherwise, failing to do so, it would ensue the inability to foster befitting language educators who scaffolds the teaching and learning process of the English language in the region, and Colombia accordingly. Consequently, it is essential that language educators in higher education accomplish adequate instructions, which suit specific learning conditions to foster pre-service language teachers’ performance and prompt after-effects on coming language learners.

Following this lead, and being in charge of some courses within the communicative area comprised by the syllabus enacted by the ELP of the Amazonia University, a discernible shift is fundamental to upturn factual language flaws in this particular program as a contribution to the students’ overall learning process. Generally, the students’ level of language proficiency of the Pre-service English Teacher Program

from the University of Amazonia, has been a persistent concern among the academic community; subsequently several attempts to improve the English level of students and teachers have been made since the creation of this academic program ten years ago.

One of the most relevant attempts to address the ELP needs occurred along a two-year accompaniment from the Ministry of Education as part of the former National Bilingual Plan. Such project conceived the acquaintance of seven public universities in order to diagnose the students and teachers' English level of proficiency, among other educational aspects, as well as promoting a language performance improvement plan. Therefore, a noteworthy English language diagnosis was applied to the learners from the ELP within the frame of the "Proyecto de Fortalecimiento a Programas de Licenciatura en Lenguas 2008 - 2010". Although such diagnosis was carried out between 2008 and 2010, this condition has not been amended yet and can be discerned in every language test the students have presented throughout the development of the English courses of this particular undergraduate program.

The aforementioned diagnostic test was administered to sixty-one students from different semesters assigned randomly. However, in characterizing the diagnosis results found by the academic peer advisors, the problematic situation was particularly identified in higher courses where students were unable to move from level A2. Specifically, results from the Ministerio de Educación (2010) stated the following:

> Al organizar los resultados de acuerdo a los niveles por curso, se observa que el número de estudiantes con un nivel A1 en el curso Básico I es alto (50%); sin embargo este disminuye claramente a través del programa. La distribución de los estudiantes en A2 no es clara. El número de estudiantes en este nivel aumenta interesantemente en Intermedio II y disminuye bastante en Intermedio III; sin embargo un porcentaje de ellos permanece en los cursos Avanzados en sexto y séptimo semestre. El nivel A2 debería haberse podido superar alrededor del quinto semestre. (Duran et al, 2009).

It is important to stress that such diagnosis report supported the general perception of professors about the conspicuous progression throughout the basic levels. However, this learning stage was followed by a period of stagnation at higher

levels. Another crucial factor raised from such diagnostic evaluation was that the students' listening performance was the skill with the lowest production. Specifically, the students' aural perceptive English skill yields an elementary performance. More exactly, not only the learners' level had shown a stagnation period, but also more distressing was that the listening performance also depicted a humble production.

To elaborate further on contemporary learners' language flaws, and conceiving Lange and Wagner (1991) conceptions on the nature of teacher educators' role as a constructor and a promoter of the language learning process more than a practitioner; being a teacher in charge of the Phonetics and Phonology Course (PPC), in the ELP at the University of Amazonia, demanded the requirement to look into particular limitations that the learners had regarding their coursework performance in relation to the overall language effectiveness they are supposed to attain. Therefore, following the lead of nowadays more avowed language tests, the Computer-Based TOEFL Test (CBT) was administrated to the class enrolled in the PPC with the aim to become more sensible of the students' current aural reception skill.

Following on from previous diagnosis and ELP professors' insights, the data gathered from this evaluation demonstrated once again a low students' language attainment. Evidencing a state of underdevelopment in the listening skill with regard to the established standards for such particular language level. In a succinct manner, the results were shown as follows: 8 out of 30 students, 26.6 % of the class, scored A1 according to the level posited by the Common European Framework; 14 of them, 46.6% of the class, scored B1; 5 of them, 16.6% of the class scored B2, and merely 3 of them, 10% of the class, scored B2. The complete descriptive statistics are in the next graphic.

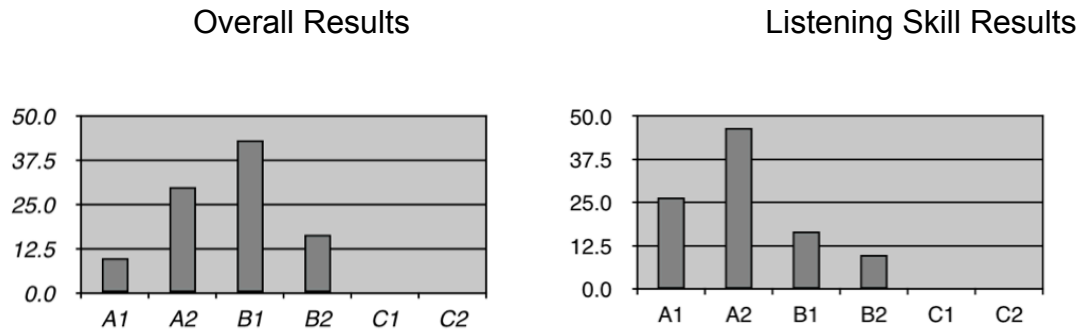

Figure 1. Comparison of overall vs. listening only IELTS results.

As a result of the shortcoming that fourth-semester students had in the listening component, and as their Phonetic and Phonology professor, a quandary was arisen but in need of being cleared up. To pursue this matter, therefore, a set of paradigms related to language teaching and learning came forth to envisage and put forth a teaching deployment. Accordingly, a test aimed to evaluate specific aspects related to suprasegmentals features of the language (stress, rhythm and intonation), was administered to them (Annexes 1 to 4). The results showed high rates of failure in features of the language such as segmentation at sentence and word levels, sound pattern identification, and Phoneme Alliteration in vowel and consonant segments (Annex 5). It was also evidenced that the students with the lower scores in the suprasegmentals test were generally the ones with lower score in the listening skill test, which evidenced a direct relation between the low performance in listening skill and the lack of awareness about stress, rhythm and intonation.

As mentioned earlier, the process of learning a language should ideally embrace the development of the four language skills in a uniform manner. Inauspiciously, there is a strong tendency to favor abilities such as reading and writing over the abilities of listening and speaking. Accordingly, **THE SCIENTIFIC PROBLEM** of this study is that fourth-semester students from the English Language Program at the University of Amazonia presented a lopsided achievement in their English Language skills, being the listening skill the one posing the most persistent rate of failure.

Accordingly, related studies on this particular aspect are somehow limited, However, as also noted by Harmer (2009), the main source of listening for the students is the teachers' voice, that can pose an obstacle for creating adequate

listening models that would reflect in none effective communicational skills. There is again the priority to scaffold properly the pre-service teachers' language learning on behalf of a befitting use of the language in a non-native context.

Also considering the international scope, in the relevant study on aural perception called "What makes listening difficult?" carried out by The Center for Advanced Study of Language of the University of Maryland in 2010, the need of improving listening as an essential part of the communication process is addressed. Such assumption leads language educators to endorse more useful and effective teaching practices and be aware of factors affecting foreign language listening comprehension, which might assist the enhancement of this particular skill and foster effective communication.

To consolidate the concerns expressed by the mentioned before authors, if we consider the listening skill segment contained in the Colombian instruction guidelines for teaching English from basic to high school, "Estándares Básicos de Competencia en Lenguas Extranjeras"; it is clear that the set of listening goals displayed, "logros", are macro-skills closely related to language discourse. Certainly, a conspicuous key point that the educational system has concerning the listening skill since those "Estándares" primes the development of macros skills, without considering the development of abilities related to the micro skills for the progression of the aural skill; starting from the decoding of a message and subsequently the understanding of ideas. In yet another point, it is the absence of listening assessment in national academic tests such as "ICFES" and "Prueba SABER", which yet again evidences the lack of awareness about the importance of the listening skill, as well as the generalized neglect towards listening.

To elucidate such national complexion, and considering the academic context and the curriculum of the pre-service English teachers' Program from Universidad de la Amazonia; it can be also perceived that the conception of the listening ability has been limited to the achievement of macro skills, associated to listening comprehension not only as the goal, but also as the way of instruction, without any other approach than playing recordings in hope of the automatic development of the listening skill. Failing to develop the micro-skills required for scaffolding a proper listening development.

Analyzing the current situation in language instruction with regard to listening and the ELP reality itself, the present study is particularly focused on the development of a set of listening micro-skills grouped as phonological awareness, which

according to Torgesen (1999), can be defined as the ability to notice, think about and manipulate individual sounds from speech, that includes abilities such as phoneme blending, sound comparison, phoneme segmentation, among others, as a first upturn in the process of the aural perceptive skill.

Consequently, this present study intended to address the lack of awareness regarding the listening micro skills and the implications of them in the optimal development of such important skill. To achieve such endeavour, the role of raising phonological awareness on prosodic features of the English language (stress, rhythm and intonation), by using acoustic analysis visual feedback, in fostering listening comprehension was examined.

That is why the **OBJECT OF STUDY** of this research is mainly focused on fostering language prosody as a first step in the process of listening, and particularly, the **FIELD OF ACTION** is framed around visual based training to enhance language prosody. Accordingly, the **OBJECTIVE** is to test the impact of visual based prosody training on the development of English listening micro-skills. Therefore, in order to accomplish the aforementioned objective, the following set of **SCIENTIFIC TASKS** were established:

1. Constructing theoretical foundations.
2. Identification of key indicators for comparison.
3. Assigning of the research population into random groups and implementation of the tests.
4. Training the students through Acoustic visual feedback.
5. Comparison of results of pre test and posttest.

Bearing in mind authors' assumptions and the context of the English language teaching, this dissertation is mainly outlined around the **HYPOTHESIS** that listening micro-skills can be fostered by the use of visual based prosody training as an initial advancement of the development of the Listening skill. In accordance with that view and in order to address the research problem, the literature review was essentially focused on visual feedback, prosodic features of the language, phonological awareness, and the relation between supra-segmentals and listening.

As stated before, due to the complex and abstract nature of the listening skill, which makes it onerous to observe and measure, such language ability has been systematically neglected in classroom practice and in academic research as well. In Consequence, the amount of research related to listening in the context of ELT is limited; and even more when assorted with the mediation of prosody training.

However, it is relevant to mention some **PREVIOUS STUDIES** that bestow a valuable insight in this field. Namely Akker and Cutler's (2003) study related to the relevance of prosodic cues in native and nonnative listening appraises that the lack of prosody use to direct attention to a specific word in a sentence would lead to fail to achieve effective listening skills. Another study worth citing is the one carried out by Aliaga and Mora (2007) mainly concerned with assessing the effects of phonetic training on L2 sound perception and production. This study explored the effect of systematic training on topics related to phonetics and its effect on productive and perceptive skills. Lastly, it is pertinent to mention Kuzla's et al. (2006) work called 'Prosodic Structure Affects the Production and Perception of Voice-assimilated German Fricatives', which studies the influence of prosodic features of the language in a series of segmentals.

To elucidate the aforesaid theoretical foundations, some authors were conceived along this study. Regarding the prosodic features of the language teaching as conceptions embracing aspects such as the relevance of communicating meaning beyond the words and its importance in discourse were asserted by Ladefoged (2006). Conceiving listening theories, Nunan (1997) and Morley (1991) yield the conception of an unbalanced skill development due to the disregard posited on listening instruction. For Cassady (2005) and Venkatagiri et al. (2007), conceptions on phonological awareness and its relation to speech comprehensibility were necessarily to be considered as well. In characterizing instruction devices, Anderson (1994) was a precursor in entailing and denoting the use of visual feedback and its relevance in learners' language development. And in regards to the relation between supra-segmentals and listening, Barb (2002), and Aliaga & Mora (2007) conceptualize the relation between the comprehensibility in oral production and in aural perception. In stating the pertinence of exposing the language learners to the maximum possible amount of different speaker's utterances for efficiently building acoustic foundations Lively et al (1993) and Thompson (2007) concepts were cited. Regarding the idea of using of visual feedback as a tool for language development by stimulating perception skills, Öster (1989), Anderson (1994) and Dowd et al. (1998) ideas were taking into account. Studies by Hardison (2004) and Pennington and Ellis (2000) also were considered to prove the relevance of using visual feedback to Foster language skills.

At a more specific and methodological level, this quantitative quasi-experimental study was conducted by using a confirmatory methodology. Since assigning the subjects randomly was not a possibility, the Nonequivalent comparison-Group design was implemented. The data was gathered through a pre-test, which was

assessed using the KR-21 formula estimate its reliability and the CVR formula for validity, followed by a period of training to a treatment group. Finally, a post-test was administered to all the participants, the treatment group and the control one. The software Statistical Package of Social Sciences (SPSSS v.21) was the one used in the process of data analysis; given that through this software could assess the fluctuation between the mean from the pre and posttests.

As indicated earlier, studies on listening comprehension have been narrowed to examine this language skill as a passive one, and very little research supports a different perception. Therefore, with the aim of fostering Colombian bilingual policies and language training reality, it is necessary to look for ways of fostering appropriate FL instruction. Specifically, on the field of aural perception is necessary to go beyond traditional beliefs which have been historically settled, and where even new educational trends are newly emerging, they still disregard or completely ignore this particular language skill.

There is yet another point to be made. The lack of strategies to enhance the current level of the listening performance would bring a strong negative impact toward the goal of preparing qualified individuals able to face the challenges allocated to our current society. Therefore, it is mandatory to find ways of developing listening fluency as part of the overall language skills needed when the world is getting more globalized and the access to authentic materials and authentic interaction is every time more frequent and demanded. Furthermore, the responsibility that the educational policies on language learning have assigned in higher education should be a challenge for all the educators who are in charge of training future language teachers.

Thus, the study of listening instruction becomes a priority for this particular undergraduate program of the University of Amazonia since the lack of listening fluency is a crucial factor in improving their overall language competence. The lack of intelligibility in spoken discourse would lead to communication break, and what the educational system and the labor market are demanding is bilingual citizens, where training competent language teachers is unavoidable for facing the challenges of transforming individuals who succeed efficiently in the current society.

The EFL field stands in need of research with regard to listening instruction since such skill lacks not only theoretical conceptions, but also practical strategies focused on its training and furtherance. As a matter of fact, the dedicated

instruction on listening performance is generally non-existent. As a result, finding specific ways of fostering listening skill improvement would be highly beneficial for the forthcoming teachers graduated from the English Language Program at the University of Amazonia, and subsequently, for all the pupils or scholars they will instruct in their professional life. Accordingly, the present study could contribute to expand the scope of listening teaching by presenting the language teachers with a method that involves visual perception as a mean of supporting the development of the listening skill, Moreover this study intends to direct the language teachers attention on the disregard of the listening skill and to encourage them to incorporate techniques that address this specific competence. The idea that listening can be fostered by visual feedback stimuli resulting in better comprehension may result useful not only for regular instruction, but for addressing exceptional difficulties of specific students in a field that lacks ready to use classroom tools.

1.Theoretical Framework

This chapter reviews the literature relevant to the investigation and concerning to the nature of the research problem and the hypothesis. In essence, the purpose of this present study is to examine to what extent the use of visual feedback from acoustic utterances could help raising phonological awareness in the context of English language teaching, regarding the reality depicted by the students enrolled in the fourth semester at the English Language Program of the University of Amazonia; features concerned directly to the low performance learners present at the aural perception of English decoding messages, and specifically related to the lack of awareness of the prosodic features of the language, that was evidenced not only in listening tests, but also by assessing particular features of the language such as word linking, rhythm, Stress and intonation as well. Different theories support the idea that those features of the language, are part of the first steps of the complex listening process and if not address properly would pose an obstacle for fluid communication.

In order, therefore, to mend pre-service teachers' low performance at the English Language Program, it was fundamental that the Phonetics and Phonology Course as a course of the communicative area sought for possible theories, knowledge and analysis, which could promote learners' better language attainment. Following this lead, and in order to address such objective, insightful breadths of literature constructs are thoughtfully framed along this unit.

Essentially, the first section of this chapter deals directly with the definition of the concept of listening. It also comprises the current condition listening instruction neglect related to the lack of understanding about its intangible nature. Besides, the crucial role that it implies in the communicative competence is also discussed. Additionally, not only does this section displays the models of the listening process, but the role of listening through the most relevant approaches in language teaching is also illustrated. The models of listening comprehension are also discussed. The second section is primarily focused on prosodic features of the language, its conceptual definition and its role in communication. The way of instruction and its situation of disregard are also mentioned. Moreover, a historical review is outlined as well as the relevance of prosodic features instruction in the development of the oral and the listening skills. Consequently, the third section ponders the notion of phonological awareness and its close connection with the listening skill. Characteristically, the relation between phonological awareness and

comprehensibility is also stated along with the importance of awareness in language. The fourth section elucidates the concept of High Variability Phonetic Training; stating the importance of exposing the language learners to the maximum possible amount of different speaker's utterances for effectively building acoustic foundations, and the listening fluency development out of the diversity of acoustic registers. Finally, the last section deals with the evolution of using of visual feedback as a tool for language development by stimulating perception skills. It also takes into account the progression of its utility in the context of ELT, and considers the specific areas of language instruction that can be benefited from this approach. Accordingly, each of the noted sections above yields a depth understanding of the particular field of study of this research by providing a critical evaluation and the current state of listening research particularly.

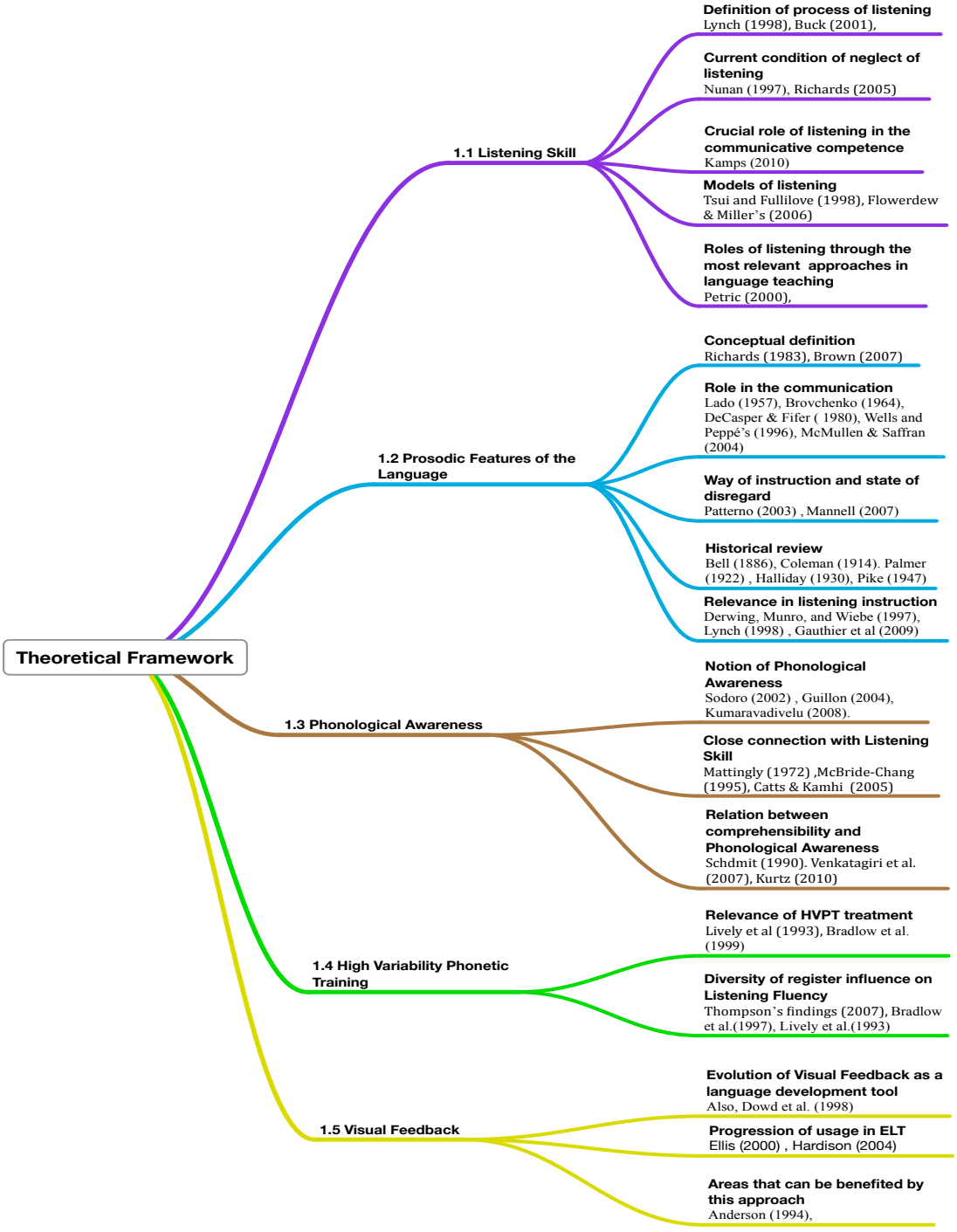

Figure 2. Theoretical Framework Mind map

1.1 LISTENING SKILL

Bearing in mind a conceptual framework for listening, and mulling over that the process involved in the listening skill is truly complex, especially for language learners, different aspects of linguistic knowledge should be implied. In fact, Lynch (1998) argues that listening is a truly complex process, which involves a wide range of sources such as phonetic, phonological, prosodic, lexical and semantic; enabling listeners to understand and to interpret spoken messages in real time. In essence, as stated by Richards (2005), the notion of the nature of listening needs to be expanded in terms of language learning and acquisition, and stop considering listening strictly limited to comprehension, in which passive qualities are entailed. Regarding this particular issue, the English professors from the English Program at the University of Amazonia were asked to provide information regarding their attitudes toward teaching listening through a interview, it was a general consensus that the listening skill was only considered for evaluation purposes but rarely taking into account for direct teaching. At this point, this research study contends the need to trace a knowledgeably map to connect a set of succeeding procedures, which allow an effective attainment of the listening skill in non-native environments.

To consolidate the aforementioned conception; Kamps (2010) asserts that even how humans attain language with easiness in their first years of life is still intriguing. However, such linguistic outperform might be modeled. Firstly, the initial step might start by determining the hurdle of word boundaries such as where single words begin and end, then what words exactly mean alone and within segments; which are achieved naturally along humans' first language development, but unavoidably attained through training for foreign language learners if taught thoughtfully.

In fact, the endorsement of learning listening features in the language classroom beyond the use of passive qualities has been cunningly contrived. However, according to Buck (2001), the process involved in listening might be summarized in the following way; first, the listener takes the incoming data, in the form of an acoustic signal, and then interprets that using a large variety of information and previous knowledge. Particularly, for communicative purposes, the listening process is an inferential process. An ongoing process of constructing and modifying the interpretation of what the oral text is about. Correspondingly, failing to decode the sounds into words would prevent the listening process to be successful from the very first stage, providing inaccurate information which would end up interfering or breaking the normal flow of communication as the listener is

contrasting the external input with the distorted version stored in his brain, which is not only flawed, but also permeated with alienated sounds from the L1. Such author's excerpt might endorse the findings pointed in the diagnosis stage of this study, where the students who evidenced lower listening scores showed clear signs of first language interference in oral production as well, such as the lack of reduced vowels production and perception, and linking words among others.

Going further into that conception, for Richards (1983, cited in Brown, 2004, 121) a close analysis of the listening attainment should be pointed out clearly. First to stress recognition, rhythm and intonation patterns, which are micro-skills involved in the decoding of a message, and later, it would evolve naturally to other macro-skills closely related to comprehension. Following Richards' assumption, also Brown's taxonomy of the listening (2007), adapted from Richards (1983), contends that the listening ability can be divided into macro and micro-skills. Within the macro-skill group are skills related to the discourse level of organization, such as distinguishing between literal and implied meanings, recognizing the communicative function of utterances according to distinctive situations, among others. On the other hand, within the micro-skills, there are elements related to sentence features (rhythm, linking, recognizing word boundaries), word (word stress) and phoneme level such as discriminating among distinctive sounds of the language. Although the micro-skills are considered essential elements for the listening comprehension process, the Professors from the English Program evidence lack of awareness about them and therefore, low motivation for including those elements as part of the English class, as showed in the table below.

Figure 3. Awareness and willingness to teach listening micro-skills.

Expanding significantly on the learning listening process, therefore, it should be negligent not to deem the development of listening as a cognitive activity. Arguably, the lack of understanding and control over this skill may be one of the

crucial factors that have driven listening to the current state of disregard in classroom instruction from a contextual framework. Therefore, a crucial factor to be considered when teaching listening is the fact that in the initial stage of listening, which involves the process of decoding the acoustic signals, it is pivotal to be able to effectively discriminate the segmental units of the language (vowels and consonants), as well as the supra-segmental features of the language (stress, rhythm, and intonation). To that end, in order to develop those features, specific training attention is necessary, otherwise, it would be tough to develop an adequate level of listening fluency by merely addressing the other language abilities and leaving listening development without valuable assistance.

Distressingly, characterizing the role of the listening skill in classroom instruction, teaching methods and techniques are scarcely framed within classroom assessment. Accordingly, a formal instruction concerning to developing listening strategies in the classroom goes greatly astray, and even more unattended when the strong tendency to conduct English classes follows the Grammar-Based approach which conceives reading and writing as the unique skills to teach dead languages. Particularly, the language instruction in the Grammar-Based approach mainly addresses written language structures and lexical aspects while disregarding explicit listening instruction. This sort of situation has been evidenced not only in the teaching practice observations of pre- service teachers at the ELT, but also in the performance of in-service English teachers in high schools, and ruefully at the university level as well.

Yet in the context of teaching and learning a language, it would be a key point to develop receptive and productive skills in a balanced way, unfortunately, it is not always the case in language classrooms. Certainly, classroom sooth has followed the path that Nunan (1997) asserted that Listening is the “Cinderella Skill” which is overlooked by its elder sister “speaking” in language learning. Moreover, the listening skill has been neglected in instruction and generally taken into account merely for assessing purposes, even though fostering the listening skill in language learners is an essential component in the formation of effective language users since it affects the communicative competence in a direct way.

To consolidate the concerns expressed by the authors cited before, and in order to understand the nature of the listening skill not only as unique, but also vital for the process of communication, Buck (2001) establishes a parallel between the two language perceptive skills, reading and listening. In fact, he claims that a slow

reader can vary their reading speed without altering the comprehension ability, but a slow listener would miss relevant pieces of information that cannot be retrieved. Once the information is lost, it can be difficult to comprehend the rest of the message.

Referring to the listening ability, Flowerdew (2006) stated that listening is a cognitive activity and not susceptible of direct observation, being very difficult to study and describe it. However, as an essential component of communicative competence, it is necessary that the language educators have an idea of what is involved in listening in any attempt to develop a principled approach to language pedagogy.

Deepen into that particular standpoint; improving language proficiency has been a matter of concern for language educators. In fact, perusing studies on second or foreign language instruction, Osada (2004) expressly states that listening comprehension has been erroneously regarded as a passive skill, where researchers have considered it as an unnecessary ability to be studied since it would be developed without assistance.

As noted before, learners enrolled in the English Program at the University of Amazonia have shown a conspicuous progression in their English performance, noticeably in regard with listening reception. An essential point though, along this section, is to comprehend the nature and the extent of such aural perceptive skill sometimes viewed with disdain and which might have a significant effect on learners' overall performance.

As reading, writing and speaking in language learning and acquisition, the listening skill plays an essential role in real communication. Therefore, a number of assertions have been considered in regard to its conception and significance in language learning. In the foreground and at a more general and conceptual level, Celce & Murcia (2001) stated that learning to speak a language is very largely a task of learning to hear it, not as simple as a physical reception of sounds, but as a cognitive process that entails a complex modus operandi. Yet another author who outlines the importance of the nature of listening is Carrier (2003), who claims that making learners competent in their ability to understand oral input will foster their overall communicative competence in the target language. Assumptions, which might explicitly endorse the flawed learners' performance attained at the ELT program.

Following the lead regarding the unique features of listening within the field of English language learning, even some authors including Ashcraft & Tran (2007) venture to call listening as the most significant of the four language skills. Such assertion is based on the assumption that listening is the first ability human beings develop in the early fetal development phase and that it is used as a tool for constructing reality in that early stage, which underlines the importance of listening as an inherent component of learning. Such conception yields a stronger challenge in the field of teaching and learning a second or foreign language since it is mostly acquired in non-native environments where the target language input is cloistered to timely settings.

Also regarding the importance of listening, for Rivers (1981), this skill is the most used ability in daily life situations. He stated that on average, we could expect to listen twice as much as we speak, four times more than we read and five times more than we write. Moreover, some other authors such as Feyten (1991) and Biemiller (2003) concur with the idea that listening is not only important, but the primary means of acquiring and learning the target language. Despite the stringent criterion previously noted in relation to the relevance of learning a language, the listening skill is still disregarded by language instructors in the classroom; situation ruefully reflected upon the English teachers' classroom performance at the University of Amazonia, where this study took place. Essentially, the professors tend to take listening for granted and concentrate more on the other abilities. Following this lead, Morley (1991) wildly alleged that listening remains one of the least understood processes in language learning, even though the crucial role it plays in both communication and language learning and acquisition.

From an educational viewpoint, therefore, it is significant to settle the difference between teaching listening and practicing listening. As mentioned before, listening is generally conceived as a passive skill, which will be supposedly attained with time. Consequently, the role of listening in class is limited to its practice by being exposed to the language through the teachers' input or any other kind of source. However, regarding some authors concerns noted before, teaching listening should be a process which involves planning and executing activities that focus on improving specific features related directly to the listening process, and in that way, the ongoing monitoring of students' skill progression is essential.
Another consideration to take into account when addressing the development of the listening skill is the assumption that it can be beneficial to become aware of the features of the language by involving metacognition practice. Accordingly, Morley claimed (1999) that the learning role of students may be framed in a three way

listening-communication context, which Morley describes as follows: unidirectional experiences, bi- or multidirectional and intra-active communication. The first one is related to situations where the learner is unable of interacting with the speaker, such as media, films, among others. The second one involves experiences in which the learner engages in speaking as well as listening. And finally, the intra-active communication (self-dialogue), which is closely related to gaining language awareness by involving metacognition activities that enhance the listening processes by activating previous knowledge and predispose learners' attention in the different elements of the language such as segmentals and suprasegmentals. In fact, activities which are distinctly used in regular praxis, but to no avail due to the lack of clear objectives and awareness on the instructional process involved along learners' development.

In view of the fact that the level of English proficiency at the university where this study was carried out was in dare need of improvement, besides the proficiency test applied to the pre-service teachers evinced a students' average level in speaking, reading and writing, overlooking the level they were in; the listening skill was still stuck in the basic stage. Such appalling situation pointed out to the idea that syntax, semantics, and lexical knowledge might not be as effective as they should be without seeking ways to optimize the decoding of the acoustic input, and that a teaching improvement plan was necessary to overcome this particular shortcoming.

Essentially, listening instruction has been scarcely contrived by the different ESL approaches and methods that have been evoked along the last decades. As mentioned by Flowerdew & Miller (2006), in the Grammar-Translation Approach, for instance, listening is not taught, as the primary object is to learn the grammar of the target language. Similarly, the Direct Method, which came as a reaction to the Grammar-Translation Approach, relies the acquisition of the language on listening. However, there is not explicit attempt to develop listening; it is just assumed that the learner understands what is said. Another one is the Audio-Lingual approach, which its main focus is to develop the ability of manipulating the structures, but once again the listening process and is not directly considered and just used to mimic how the structures are supposed to sound. And finally, with the current trend, the Communicative Approach, which is based on the premise that classroom should have a communicative value, integrates listening into the different activities believing that listening will develop without addressing it directly. As stated by Petric (2000), the listening skill role in language learning has apparently evolved

along different approaches, but it still lacks attention and a fitted methodology for teaching listening effectively.

As noted before, lack of theoretical conceptions in relation to the listening skill is still a drawback in language praxis. However, models of listening have been developed to explain how the listening process functions. Some of the most widely known are the Bottom-Up and the Top-Down models. Following on from Flowerdew & Miller's (2006) conceptualizations of those models, in the first one, the listeners build understanding by starting with the smallest units of the acoustic signal which are then combined into words, then into phrases, and later combined to create ideas, concepts and relationships among them. This model is closely related to the conception of communication through the source, encoder, channel, decoder, and destination; such model relies on these particular steps without providing importance to a wider context. In complete opposition to the Bottom-Up model, the second one, the Top-Down model, conceives previous knowledge as the basis of the listening process providing less importance to the action of decoding the units of sound, trying to understand as much as we can from the situation and the previous experiences and schema.

Besides the two listening models noted before, the Interactive model seems a more balanced option, which combines both, the Bottom-Up and the Top-Down models. Essentially, it describes the process of listening as a parallel processing, which involves a plethora of information from syntactic, semantic, phonological and pragmatic nature. As also mentioned by Flowerdew & Miller (2006), an important advantage of the Interactive model is that it allows the possibility of individual variation in linguistic processing, allowing the possibility of considering individual learning styles and easing the learning process.

Following the prevailing trend for the communicative competence and the disdain for all the grammar and linguistic features of the language in teaching, the Bottom-Up techniques have received a barrage of criticism. As discussed by Batova (2013), it is equally significant to activate background knowledge through lexical access (Top-Down) as well as to piece together linguistic data until a contextual meaning of an utterance is arrived at (Bottom-Up) in order to help language learners to become effective listeners to natural speech in a communicative competence framework. Furthering this idea, Byrnes (1994), mentioned that when listeners know the context of an utterance in advance, the process is facilitated considerably because listeners can activate prior knowledge and make the suitable inferences that result essential to understand the message. Consequently, as the

top down techniques are widely accepted and implemented by the English teachers it would be interesting to widen the array of methodological tools by including bottom up techniques aimed to foster specific aspects of the language such as stress rhythm and intonation.

Furthermore, in characterizing the importance of the listening models presented above, there is a growing amount of evidence that support the importance of developing Bottom-Up techniques. That is the case of Tsui and Fullilove (1998). They sampled 150,000 item performances by Chinese learners of English to investigate whether the skill in bottom-up processing makes some listeners more successful than others, and came to the conclusion that it does. Thereon, the significance that language instructors make use of defined methods to help students overcome listening flaws.

Accordingly, Mendelsohn (1998) denoted a gap between listening researchers' interests on the development of this particular skill and practitioners' classroom praxis. In accordance with that view, Mendelsohn claims that the classroom materials do very little to develop metacognitive skills and knowledge which certainly raise learners' consciousness of their listening process. He also stated that it is pivotal to teach students how to develop the listening ability. Such assumption shifts the emphasis of listening practice from product to process and the crucial role that teachers have on students' aural perception skill.

Arguably, defining the scope of English language teaching might be a daunting task due to the weighing variables involved in students' learning process. However, a teacher's essential role is, undoubtedly, to strive for the most befitting conditions that help learners' succeed along language acquisition. That is why to pursue this matter; the present study focused their attention on an untangled and a framed scope of the aural perception skill in order to yield an enhancement in learners' current performance in the PPC and the ELT program itself. To that end, this section dealt with the conceptual framework of the listening skill, its inception over the other language skills and feasible models which could attain a better learners' performance. Following this lead, the next sections will delve into the prosodic features of the language, trying to contrive a precise and more defined framed, which might ease and highly contribute to the stringent situation ELT learners have depicted in their language progression.

1.2 PROSODIC FEATURES OF THE LANGUAGE

At this point, therefore, it is relevant to retrieve the scope of the listening skill as an ability not only related to comprehension (macro-skills), but also to the decoding of a message (micro-skills); inception introduced by Richards (1983), and later adapted by Brown (2007). In order, therefore, to mend the disregarding conception of the listening process that has been carried out in the classrooms, and leading directly to the purpose of this study. Consequently, it is essential to focus and determine the micro-skills comprised in such cognitive process as an initial advancement in learners' enhancement of their aural reception skill.

In accordance to that view, Ladefoged (1982) particularly posited his attention on some specific set of listening micro-skills, which can be measured and observed and might have an assistive effect on learners' perception. In particular, such distinctive prosodic features are stress, rhythm and intonation, and other phenomena such as elisions, contractions and assimilations. However, these definite features of the language constitute the most widely encountered difficulty among foreign learners of English according to De Rodríguez (1993); and a major obstacle in acquiring a high level of production and perception of the language, as noted by Anderson (1993). Besides, such particular circumstance was the one being faced by the participants of this research, who were stuck in a low level of English and unable to move up to higher levels of proficiency.

To elaborate further on the foundations noted above, it is essential to elucidate that the act of communicating orally goes beyond the production and perception of words; there are other language dimensions which are used to encode features of the language that complement the lexical dimension, or what it is called suprasegmentals. For Darwin (1872), shouts convey the emotional state in humans and even in animals. In other words, the intention of the message is merely expressed by the modulation of the sound or the word itself. In essence, the acoustic speech signals are able to carry messages by themselves. A lucid example of this claim is the communication systems of animals such as birds and primates; which are naturally developed in L1, but sometimes unregarded when learning an additional language.

In yet another scientific view, the importance of the prosodic features is outlined by McMullen & Saffran (2004). They noted that the prosodic information is the first

external sound source from human origin available in utero. The filtering properties of the fluid-filled reproductive system only leave rhythmic signs of the high-frequency information. According to them, fetuses avail themselves of the incoming rhythmic patterns; again, this is a process of implicit, non-reinforced learning. Following those claims, DeCasper & Fifer (1980) added to this avowal that newborn infants prefer their mother's voice on the basis of prenatal learning and that fetal learning also encompasses the rhythmic patterns of the mother's native language; allowing newborn infants to use this experience to differentiate between languages. In accordance with that view, Lieberman (1968) stated that prosodic features are an important part of the language that can be used in favor of fostering the development of a second language.

From an educational point of view, the prosodic features of the language are those elements that are not inherent to a single segment of the language. They exist in groups of sounds and words. Particularly, from a phonological perspective, the prosody of the language is understood to be structured of supra-segmental features such as stress, rhythm and intonation, which are used to convey meaning beyond the scope of the group of sounds or group of words. As Szczepek (2007) alleged that prosody is treated by participants as a signaling domain within conversational and social action.

To elucidate clearly the aforementioned assumption, prosody plays a very relevant role in communication as it reflects elements of the language. Irony, sarcasm, emphasis, and even in interactive purposes are key signals for conversation turn taking according to Wells and Peppé's allegations (1996). Reasonably, the close relation between prosodic features and the pragmatic competence, as it promotes the understanding of the intended meaning from utterances, not only with the role of supporting the transmission of a message, but also as an independent communication instrument. In fact, when introducing the Phonetics and Phonology Course and socializing course parameters, the short amount of communication produced by the students showed the lack of use of intonation patterns, and still more, the word stress usage was scanty regardless of being enrolled in an intermediate level of English.

As noted by Brovchenko (1964), prosody can transform the communicative category of the sentence changing statements into questions, orders, requests, etc. For Akker & Cutlert (2003), such prosodic structure of speech conveys a wealth of semantic information. They illustrate a sample statement manifesting the next utterances:

a) The tourist DIDn't fly home.
b) The tourist didn't FLY home.

Although the two utterances consist of the same words, and only differ in where sentence accent falls (denoted by upper case), their implications, however, are quite different. Both imply a contrast with an earlier intention to fly home, but (1) can be used in a situation in which the tourist extended a visit (and is by implication thus still here), while (2) involves a contrast between flying and other means of transport, and implies that the tourist has used some other means to go home (and is thus no longer here). Such vivid dismay was evinced in the PPC learners' results obtained on similar exercises carried out in class, which reassured the need of exploring more practical ways of learning these features of the language.

To consolidate assumptions on the tendency of disregarding the different factors, which affect the listening process in language learning, Fox (2000) clearly pointed that not much attention was paid to the prosodic features before the twentieth century. Indeed, the first noteworthy study in regard to prosody is the elocutionary work conducted by Bell (1886). Such study was pertaining to speech intonation; solely one-third element of the linguistic prosody besides stress and rhythm. However, his work primarily set out five fundamental inflection patterns of intonation: fall, rise, fall-rise, rise-fall, and rise fall rise, and provided a significant notion to them, which still constitutes the cornerstone of intonation analysis even in present times. There is the importance to yield a more dynamic, reflexive and measurable way to monitor students' comprehension and production of prosodic features. Another distinguished step forward concerning supra-segmental analysis was the study of prosodic structures posed by Coleman (1914). Such study offered a notation system, as the one used in music, to represent the fluctuation of pitch level of particular utterances.

Regarding intonation, as a characterized component of the prosodic features, Palmer (1922) provided detailed ToBI descriptions of the intonation structure of the utterances, named stress. This notion explicitly defined the utterance into structural units or elements: head, the first stressed syllable with the following stressed and unstressed syllables up to the last stressed syllable; nucleus, the main stress, or the semantic center of the utterance; tail, unstressed and in some cases stressed syllables after the main stress. Providing a more structured manner and illustration to give correspondence to prosodic features. Correspondingly, referring to this theory, the weaknesses in the listening ability evidenced in the English Program from the Universidad de la Amazonia, may be related to lack of awareness of the structural units of intonation, such as the head, the nucleus and the tail, and rising

aware on them may help student overcome shortcomings related to micro skills listening comprehension.
A follow-up of Bells (1886) work mentioned before was made by Halliday (1930), who described a set of primary tones composed by five simple and two compound tones for English. However, there is still missing a tangible method to blend theory and practice in order to make it more feasible for language learners: falling, high rising, low rising, falling-rising, rising-falling, falling plus low rising, rising-falling plus low rising.

Additionally, Pike (1947) gave a detailed description of pitch contours, having in mind the notion of intonation, which may denote thoughts and attitudes and emphasized the important role of pitch levels in the intonation structure of American speech. According to him, the levels of intonation contours are enough to express the changes in the meaning of the utterance in the American variety of English where he developed his studies.

Lado (1957, p2), as one of the founders of modern contrastive linguistics, stated the important role of transfer in learning a language; which is highly relevant in features of the languages that differ to a great degree such as stress, rhythm and intonation. On the whole, He mentions that individuals have the tendency of transferring the forms and meanings of their native language to a foreign one. He also adds that when learning a language after the native one, the adult tends to transfer his segmental phonemes, and his stress rhythm and patterns. In accordance with that view, Patterno (2003) stated that the untrained speaker will use the intonation, and stress patterns of his own language in production and will expect the same amount of interference in perception as well. The next significant stride came as a result of the technological development and computer revolution, which permitted more reliable methods such as software going further into the study of speech utterances in a more accurate way and relying on scientific instruments, and contributing with a more tangible manner to measure supra-segmentals.

Recognizing the importance of prosody, different studies have been ascribed from diverse dimensions. Mannell (2007) noted that prosody could be regarded as part of the grammar of a given language. Also, discourse approaches have examined prosody in terms of normal interactions rather than constructed, fluent, scripted interactions. Additionally to these findings, functionalist approaches have integrated the study of prosody with the study of grammar and meaning in social interactions. Moreover, pragmatics has elucidated the distinction between the

literal meaning of a sentence and the actual meaning intended by the speaker. In other words, prosody can have the effect of altering the meaning of a sentence by denoting the speaker's attitude of what is being said (e.g., it can indicate irony, sarcasm, etc.) particularly when the prosody of the language works in combination with the social and situational context of an utterance, conferring a vivid cognizance to the language itself. Failing to develop English language learners' awareness on prosody would not only limit their ability to interpret oral utterances, but also constrain their ability of interacting effectively as they would miss language clues encoded in the prosodic system.

As noted before, there have been different approaches to the study of prosody; however, two main trends are carefully pondered to approach it; the British and the American schools. In essence, both differ in the object of the study more than the conceptual issues disseminated. The British school tends to focus on pitch contours, or sequences of pitch height, while the American school focuses their studies on pitch levels. A balanced approach between them is generally beneficial in the context of language learning.

To elaborate further and yielding scaffolding to this study, one distinctive feature of the American school was the development of ToBI that stands for Tones and Break Indices. More specifically, this is a system that provides a common standard for transcribing or labeling the prosodic structure of spoken utterances. Assuredly, the ToBI framework is an intonation and transcription system based on two levels (low and high), where individual syllables are labeled using symbols according to their properties.

Expanding that connection to the field of language teaching, verbal instruction has been closely related to the instruction of words through the study of vowel and consonant sounds, also called segmentals, regardless their communicative purpose. As Oakeshott & Taylor (1984) noted, supra-segmental features of the language are more important to acoustic input recognition than individual sounds. On the side, Lynch (1998) pointed the importance of supra-segmentals in listening by stating that they play a critical impact in how the acoustic input is interpreted. Although there is a general consensus that training in supra-segmental features is more important to improve intelligibility, a strong tendency is also keeping disallowance of the prosodic instruction in the ELT classroom.

Accordingly, it seems to be worthy to consider the prosodic features of the language in the classroom activities, not only addressing the oral production field,

but also for targeting the enhancement of the processes of sound decoding in listening. Ruefully, the instruction of those elements are confined to the Phonetics and Phonology field and failed to transcend to the actual use of the language in more communicative settings. Notwithstanding, it is relevant to mention that even following a communicate approach, sometimes language teachers need to have short breaks from such devoted methods and include some other types to overcome certain students' shortcomings in class where their characterized activities might not assist language pitfalls; namely the introduction of intonation models to establish a dissimilarity between asking for clarification or asking for agreement, which sometimes cannot be performed just by teacher's modeling.

Recognizing the importance of the impact of prosodic features in language development, an early study was carried out by Derwing, Munro, and Wiebe (1997). They investigated the impact of a course of twelve weeks, focusing on prosodic features on the performance of ESL learners with problems of fossilized English utterances. In this study, learners were recorded twice reading sentences and telling a story based on visual stimuli. Results from 57 non-native listeners showed significant changes the second time in the ESL speakers' intelligibility, comprehensibility, and accent. The researchers concluded that pronunciation instruction by emphasizing the importance of segmental units, combined with focus on prosody (stress, rhythm and intonation), can successfully change fossilized pronunciation patterns.

To consolidate assertions on prosodic features, as mentioned by Gauthier et al (2009), word stress, intonation, and rhythm are the prosodic features of the language, which are extremely important to develop comprehensibility. In fact, language teachers should include prosodic training in instruction, not only in specialized courses related to linguistics as Phonetics and Phonology, but also in daily language activities starting from the most basic level to the highest level of proficiency, and there is where this study was trying to point at when going further on the aural perception skill as a scaffold in the overall language learner's performance by providing a more tangible manner to teach and assess abstract language phenomena. In concordance, the next section will deal with the development of a set of abilities related to a set of listening micro-skills grouped as phonological awareness.

1.3 PHONOLOGICAL AWARENESS

Considering the fact that language learning implies several challenges in L2 learners, teachers' need to be aware of the use of a variety of tools to create learning opportunities as posited by Kumaravadivelu (2008). Concretely, providing ample opportunities for language learners to pay particular attention to new features of the linguistic input that are being currently learned can contribute to activate psycholinguistic processes. Thus, regarding linguistic input in relation to prosodic features, Sodoro (2002) elucidates the conception of phonological awareness as the ability to detect and eventually manipulate auditory units that do not necessarily hold syntactic meaning; which ease language teachers' monitoring and at the same time learners' awareness of abstract linguistic features.

More precisely, according to the Bureau of Instructional Support of the Florida Department of Education (2002), phonological awareness can be defined as the ability of becoming consciously aware of phonemes as individual segments in words. Moreover, according to Guillon (2004), phonological awareness is the individual's recognition of the phonological structure, or sound structure of spoken words. Assumptions that provide a starting point to the design, implementation and analysis of teaching mechanisms to gain learners' activation of metacognitive strategies.

Closely associated studies have also found that phonological awareness has been a major breakthrough in reading instruction. Assuredly, there are literally reams of research about phonological awareness, generally taking into consideration its utility as a predictor of reading abilities in children. Beyond the scope of the reading skill, phonological awareness is considered to be part of a larger phonological system used for speaking and especially for listening, as stated by Catts & Kamhi (2005). Furthering that idea, McBride-Chang (1995), stated that speech and language processing abilities are closely related to phonological awareness; not only in speech perception, but also in verbal short-term memory.

Following his findings, Mattingly (1972) noted that phonological awareness differs from other phonological abilities because it is a metalinguistic skill that requires conscious awareness and reflection on the structures of language. Bearing in mind this assumption, it seems that it is necessary to find pedagogical ways to foster language metacognition and other activities that help gaining awareness of the language, mainly for the abilities that generally do not receive direct attention from the language teacher such as the listening skill. As the lack of awareness of the

features of the language was a critical failure previously diagnosed to the student from the Language Program at the University of Amazonia, specifically related to stress, rhythm and intonation, and that the theories presented point to a relation between those aspects and the ability of effectively understanding oral language, it is worth to implement activities intended to rise language awareness as a possible solution to the learners deficiencies.

In the context of language learning regarding oral production, Venkatagiri et al. (2007) pointed out to a possible relationship between phonological awareness and speech production and comprehensibility by testing the influence of phonological awareness scores and the rate of comprehensibility; finding a strong positive correlation between those variables. Following this lead, Cassady (2005) stated that the first step in gaining phonological processing skills is to detect, or isolate, the component sound within a word; after this initial stage, the ability to manipulate those phonological units starts progressing. Following that lead, the present study looked for ways of fostering language awareness, particularly targeting stress, rhythm and intonation as the means of improving listening micro skills.

Even though few researchers have been driven to the significance and impact of the listening skill, the idea of taking into account the role of consciousness in language was fully explored by Schdmit (1990). Based on his findings, he stated:

> We will not learn anything from input we hear and understand unless we notice something about the input. Consciousness of features of the input can serve as a trigger, which activates the first stage in the process of incorporating new linguistic features into ones language competence. (p. 167)

As also mentioned by Kurtz (2010), the listening skill is a strong foundation for the development of phonological awareness, however, in spite of the brief but notable advances made in phonological awareness, teachers' practices are still scant of mechanisms, which boost learners' ability to decode messages with easiness.

Taking these assumptions into consideration, it would be significant for the process of learning a language to draw upon enlightening proceedings to foster awareness in language. Specifically for this study, the pursuance of phonological awareness will be implemented as a way to facilitate the decoding of sounds as a first step in the process of the listening skill. In fact, such sooth is undoubtedly far-reaching if we consider the role played by the forthcoming language teachers, which requires to go beyond an average language user performance to a language mentor

performance, since being a teacher entails to have fully acquainted all the components of the language to foster their pupils' own language pursuance.

1.4 HIGH VARIABILITY PHONETIC TRAINING

As mentioned earlier, a small number of language researches on the listening skill have been undertaken. Nonetheless, High Variability Phonetic Training is a reliable method in Phonetic teaching that is based on using an extensive array of utterances from multiple speakers to ease the process of attaining listening. Assuredly, the use of this method is believed to enhance the process of learning a foreign language by broadening the acoustic repertoire; which is useful not only for speaking, but also for the perceptive processes of the listening ability.

Within such a context, Lively et al (1993) were the first to show that increasing the variability of the input gives results in greater and more generalizable attainment in L2 speech perception. Thenceforth some more studies have shown analogous results. In fact, based on Thompson's findings (2007), the distinctive feature of HVPT is that learners are exposed to multiple voices producing the target sounds, rather than a single voice as is often the case in a classroom environment. In relation to this matter, he also states that:

> The early studies using HVPT indicated that training learners to perceive sounds produced by multiple talkers in multiple Phonetic contexts results in significantly greater improvement than training that relies on a single talker or single context. Furthermore, the HVPT technique results in significantly greater generalizability to the identification of tokens produced by new talkers. Another important finding from laboratory HVPT studies relates to the role of feedback. When learners are given immediate feedback on whether their response is correct or not, more learning occurs.

To that end, the Phonetic training paradigm that has proved more success in fostering the perception and dissociation ability of sounds of a foreign language is the High Variability Phonetic Training (HVPT) method. In essence, it draws learners' attention towards pertinent Phonetic cues by presenting them with HVPT stimuli in various Phonetic contexts obtained from natural words produced by different speakers (Bradlow et al., 1997; Lively et al., 1993).

To elaborate further, it is widely recognized and stressed by several studies of this particular branch, the importance of exposing learners to multiple natural

utterances produced by many speakers. The results of this instruction have been proved to be highly effective in EFL instruction since this procedure leads the language student to create new Phonetic categories instead of absolute sound references, which might be a hindrance for language learners if their sound references are basically determined by their mother tongue.

Also Bradlow et al. (1999) have asserted that results on previous studies have hinted that HVPT improves the identification of L2 utterances and increases the retention for longer periods than regular instruction based on low variability. Additionally, the use of High variability Phonetic Training can help to resemble the variety of input of native settings, which optimizes the development of the foreign language in a more natural like setting, which promotes a better language development and attainment. As noted by Thomson (2012), HVPT, presented via an engaging interface that includes immediate feedback, can successfully orient most learners' attention to the Phonetic information necessary for the development of L2 sound categories. Thus, contributing to better sound discrimination and thereby listening comprehension as a pertaining scaffold in the process of learning a language.

Assuredly, studies on listening have been diminished; however, the effectiveness of using high variability Phonetic has been conclusively proved in research related to dissociation of specific sounds of the target language. Particularly, in the context of this study, it served as an adjunct in the process of raising phonological awareness, since the students required to be exposed to a wide variety of utterances in order to achieve accurate and lasting listening goals as a learning stage in their overall language performance. For the present study the training session was carried out using a novel methodology of receiving real-time visual feedback from different utterances, by using a set of specialized software.

1.5 Visual Feedback

Focusing on the findings of HVPT, other significant results on students were perceived from the feedback provided shortly after HVPT training. Thus, bearing in mind different learning styles, this study conceived the implementation of a more tangible technique as the one provided by visual feedback.

From an educational point of view, visual feedback has most often been studied in terms of language therapy in L1 as a tool for language development, helping individuals with delayed speech development and difficulties in speech intelligibility. More recently, the use of this type of apparatus has been extended to the field of foreign language instruction mostly as a way of improving pronunciation. As stated by Anderson (1994), the kinds of English supra-segmental problems that are addressed and remediated through visual feedback practices are incorrect accenting of the syllables, inappropriate amount timing of syllables, inappropriate direction, slope, and height of pitch movements, lack of words linking, and errors in vowel insertion (epenthesis), all of them highly which are disruptive to natural English rhythm. In the same way, students from the English Program of the Universidad de la Amazonia present all the disruptive characteristics mentioned before, as evidenced in the diagnostic stage, which strongly suggested the urgent need of addressing that problematic situation.

Also, Dowd et al. (1998) furthered this idea by testing the effect of visual feedback of acoustic measurements of the vocal tract for learning how to produce vowel sound in a foreign language, that was carried out by testing a sample of native speakers of English, which significantly improved their articulation and pronunciation of eleven French vowels after receiving real time visual information of vowel production.

The studies stated above hinted that receiving visual feedback information regarding the articulation of the sounds can be beneficial to the development of foreign language development, and might open the door for exploring the possible applications in the field of foreign language development. Furthering that idea, Öster (1989) put forth that computer-based visual speech training systems have enhanced the possibility for profoundly hearing-impaired children as well as for L2-speakers to improve their pronunciation. It has been noted that the language achievements resulted from visual based language training are not only, but consistently acquired, and bolster longer periods of retention.

Studies by Hardison (2004) and Pennington and Ellis (2000) have also shown that computer technology can help foreign language learners would be able to learn prosodic patterns if the computer tasks focus learners' attention on how prosodic features works in an approach within pieces of discourse, which would sustain the effect of HVPT training meaningfully. They also noted that the positive effects of computer-assisted pronunciation activities on ESL learners' use of stress, intonation and overall use of the language and comprehensibility are evident through the advancement of various investigations conducted in this particular field.

Thus, it is believed by the researcher of this study, that visual feedback from acoustic utterances could trigger the process of decoding the target language sounds. Clearly emerging HVPT training with visual feedback by stimulating the visual perceptive canal and permitting to optimize the listening skill through the integration of vision and listening might attain students' phonological awareness in a lighthearted way; which not only would help to accomplish research objectives on raising phonological awareness, but endorsed also the aural learning sequence as a primary scaffold in the complex process of listening.

3. METHODS AND PROCEDURES

This chapter completely covers the experimental part of the study. It is structured around six leading points: first, the aspects related directly to the design of the study, secondly, the research variables evinced for the purpose of the investigation, thirdly, the description of the participants of the study, fourthly, a depiction of the settings of the study, fifthly, the instrumentation used for the data collection stage, and finally the procedure followed throughout the experiment.

2.1 DESIGN OF THE STUDY

This quantitative study is framed around a systematic empirical methodological research, which served for the purpose of verifying the hypothesis from the present study. Particularly, empirical data is gathered in order to examine and prove the research hypothesis, bearing in mind the scantiness of information on this field and the contrivance this study could yield. Additionally, this quasi-experimental study was conducted by using the Nonequivalent Comparison-Group design according to Johnson, B. & Christensen, (2010) since assigning the subjects randomly was not a possibility because of ethical issues. In accordance with that view, the whole group of participants received instruction on the same content; however, only half of the subjects undertake the steps promoted gradually.

To elaborate further and characteristically to this study, an initial task was framing the problem and defining the variables involved in the field of study, then the formulation of the hypothesis; and consequentially, the design of the innovation implemented which was carried out as follows:

a. The design of the training to verify the hypothesis.
b. The implementation of the training.
c. Further considerations on the training effects.

With clearly identifiable sets of study and reflection, following the Non-equivalent Comparison-group design, the undivided whole of participants undertook the following actions. First, the data was gathered through a pre-test, which evaluated thoroughly the level of performance of the entire sample in relation to supra-segmental features of the language awareness and also usage. The content of the test was closely related to the one used in the diagnosis phase. Afterwards, a training period was conducted to both groups of students randomly selected. Half of the subjects undertook regular classes, whereas the others rehearsed on visual-

based supra-segmental training. Finally, a post-test was administered again to all the participants in the random group and the control one.
The structure of the text is represented in the next figure:

GA 01 x1 02

- - - - - - - - - - - - -

GB 01 x2 02

Figure 4. Structure of a Nonequivalent Comparison-Group design

GA and GB stand for treatment and control groups respectively, 01 stands for the tests before intensive training, 02 stands for the tests after the treatment, x1 stands for one type of treatment and x2 stands for a second kind of treatment; corresponding features to this particular type of study.

2.2 RESEARCH VARIABLES

As mentioned earlier, this study was designed considering research variables in accordance with the core of the problem, namely, one independent variable visual feedback based training and one dependent variable the phonological awareness caused by the visual-based supra-segmental training.

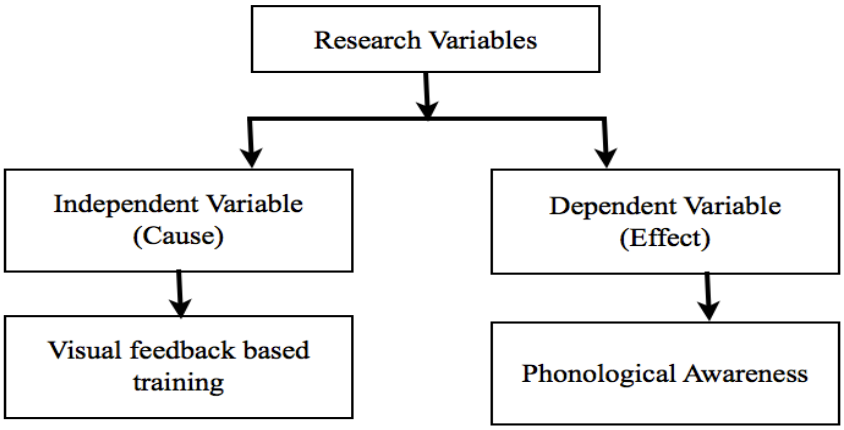

Figure 5. Research Variables

Furthering the variables above, it is believed by the researcher of this study that by using visual feedback training as a cause along the learners' listening development; the effect of phonological awareness raise will be perceived in their individual aural performance. In essence, an application procedure that would enrich the initial steps in the listening process.

2.3 PARTICIPANTS

In characterizing the subjects, a total of 29 students, 18 females and 11 males, participated in this study. Particularly, all of them were nonnative English speakers enrolled in the Phonetics and Phonology course in a Pre-service English Teaching Program. Their ages were between 1 and 24 (mean 19,17). They all had been exposed to a minimum of two years of formal English instruction at the undergraduate level, covering a total of 576 hours of EFL instruction. The age at which they began to learn English ranged from 6 to 18 (mean 12,2). None of them reported any hearing or speech pathology that could interfere with the research process. And, all of them were native speakers of Spanish.

The subjects of this study were chosen since the researcher of this study was in charge of the Phonetics and Phonology course and perceived the student's egregious listening comprehension. Factor that affected the objectives stated along the coursework, and slowed down the students' regular learning process determined by that particular level.

Following the principles of the Non-equivalent Comparison-group design, the participants were randomly separated in two distinct groups: the treatment and the control. Generally, the control group constituted by a total of 15 undergraduate students received the regular instruction conceived and practiced in the former insight of the Phonetics and phonology coursework; whereas in the treatment group, the other 14 students covered the same range of contents in an equivalent amount of time, however, adhering to their classroom practice the new insight of Visual Feedback Based Instruction.

2.4 SETTING OF THE STUDY

In the main, this quasi-experimental study was conducted at the University of Amazonia. Particularly, for the treatment group the instruction was given in a quiet room, the English Department language lab, playing a wide range of different stimuli over headphones by using a variety of computer software to randomize and present the utterances, and likewise to store and organize the resulting data from the different tests carried out throughout the study. On the other hand, the control group sustained classroom activities in a standard room type.

2.5 DATA COLLECTION INSTRUMENTS

Throughout the present study diverse instruments were used as gathering data tools. These instruments are fully described below as regards the sequence of appearance along the stages of this research.

2.5.1 DIAGNOSIS STAGE

In this initial stage of the study, all the instruments were aimed to gather relevant information required to define the learning issue affecting the students' English performance, and to narrow it down to a specific focus area. The instrument used in the diagnosis stage were:

- Ministry of Education Assessment data
- Teachers Listening Micro-skills Survey
- Computer-Based TOEFL Test (Old Papers)
- Supra-segmental features test

2.5.1.1 MINISTRY OF EDUCATION ASSESSMENT DATA

In order to determine the subject matter of the study, it was required to rely on data from the Ministry of Education diagnosis, which was the result of an all-inclusive assessment carried out by the Ministry of Education as part of the "Programa de Fortalecimiento de Competencias en Lengua Extranjera - PFDCLE", former "Plan Nacional de Bilingüismo 2004-2019". Such report was written by MEN peers in 2008 as a strategy to sustain and strengthen academic programs that offered degrees in Languages / English in Colombia. Specifically, this document dissected a comprehensive and detailed analysis of the English Language Program composed by eight specific factors:

1. Mission, Vision and Institutional Project
2. Students
3. Professors
4. Academic and Institutional Procedures
5. Welfare
6. Administration and Management
7. Graduates and Impact
8. Facilities.

The use of this assessment data was mainly to acknowledge the students' level of English displaying a set of shortcomings and weaknesses developed by the pre-service teachers at the English Language Program in earlier times.

2.5.1.2 TEACHERS LISTENING MICRO-SKILLS SURVEY

As part of the process of characterizing the scientific problem, it was necessary to identify the teachers' attitudes and knowledge related to the listening micro-skills. Firstly, to establish to what extent they were familiar with the topic; and secondly, to discover how willing they were to include it in classroom activities. A survey was administered to address those topics, it was a 10 item electronic survey, which include open and close question: The survey was voluntarily taken by 10 teachers from the English Program of the University of Amazonia. See annex 6.

2.5.1.3 COMPUTER-BASED TOEFL TEST

The Computer-Based TOEFL Test (CBT) was administered to the whole class enrolled in the PPC with the objective to become more sensible of the students' current level of proficiency and specifically to the aural reception skill. The CBT has four sections: Listening, Grammar, Reading and Writing. The structure of the CBT test by the is described as follows by the official TOEFL webpage:

> The Listening section measures the test taker's ability to understand English as it is spoken in North America, including frequently used vocabulary, expressions and grammar. The Grammar section measures the ability to recognize language that is appropriate for standard written English. The Reading section uses passages to measure the ability to understand non-technical reading material, but new tasks that require the test taker to become more closely involved with the text have been developed. The

Writing section measures the person's ability to generate, organize and support ideas using standard written English in an essay.

2.5.1.4 SUPRA-SEGMENTAL FEATURES TEST

After analyzing the outcome of the assessment acknowledged from the PFDCLE, and the standardized test applied to complete group of the students; and after evidencing a shortcoming related to the listening skill, it was necessary to design a test proposed to evaluate specific features of the language related to supra-segmentals. The aim of this test was mainly to appraise a possible relation between the learners' low performance in the listening skill and the lack of command of supra-segmental features of the language.

Such diagnostic test was designed based on the Phonological Awareness sub-tasks proposed by Gillon (2004). Four main categories were taking into account, Phoneme identification, Word Segmentation, Syllable Segmentation and Sound Pattern Memory.

For the Phoneme Identification section, randomized recording of words were presented with two options to choose from. The Word Segmentation part was also carried out presenting randomized recordings of linked, natural chunks of speech, along with the task of identifying the number of words in it. In the Syllable segmentation part words were presented with the task of identifying the number of syllables. Finally, for the Sound pattern memory section recordings of natural speech were presented along with the task of recalling the stressed parts of the sentence.

2.5.2 PRE-TESTING STAGE

The pre-test stage was aimed at measuring the subjects' English level before starting the training phase to establish a baseline for the ongoing assessment of the learning process. Along this stage, a unique instrument was implemented to the complete group of 29 students.

2.5.2.1 PRE-TEST STRUCTURE

The assessment was conducted based on the Phonological Awareness sub-tasks proposed by Gillon (2004). Four main categories were taking into account, Phoneme identification, Word Segmentation, Syllable Segmentation and Sound Pattern Memory.

The Phoneme identification task consisted of listening to a set of two words differing in one phonological segment, e.g., day and they, and choosing an answer from the options provided. The Word Segmentation task consisted of listening to a chunk of linked speech e.g., /ajləvərəlɑt/ (I love her a lot.), and number the amount of words pronounced in every given sentence. The Syllable Segmentation part consisted of listening to a given word and breaking it into units. The Sound Pattern Memory task consisted of recalling the rhythmical structure of sound patterns (word stress) and from sentences (rhythm). Each one of the four sections had three rounds of ten questions presented in an aleatory order.

2.5.2.2 TEST RELIABILITY

To measure the consistency of the answers in relation to reliability of the test, the results were assessed with the KR-21 formula. The reliability of the test was estimated 0.67 through KR-21 formula as stated below.

$$R = \left(\frac{k}{k\ \ 1}\right)\left(1\text{-}\frac{X\ \ k\ \ X}{kS}\right) R = \left(\frac{100}{99}\right)\left(1\text{-}\frac{59{,}1\ \left(100\ \ \ 59{,}1\right)}{\left(100\right)\left(71{,}5\right)}\right) = 0.674$$

Figure 6. Test Reliability

R= stands for test reliability, K= stands for the number of items on the test, X= stands for mean of the scores and S= stands for the variance of the test scores.

2.5.2.3 TEST VALIDITY

In order to assess whether the test would measure what was purported to measure, two validity modes were taken into account, face validity and content validity. In the former mode, the test was submitted to a panel of colleagues whose area of expertise is Phonetics and Phonology. They all agreed that the test was

appropriate and relevant to evaluate the subject of the present research. In the latter mode, C.H Lawsche CRV Formula was applied.

$$CVR = [(4 - (5 / 2)) / (5 / 2)] = 0.6$$

Figure 7. Test Validity

Content Validity Ratio Formula, CVR = [(E - (N / 2)) / (N / 2)], N= stands for number of experts, test reliability, E= stands for the number of experts that rated the test essential.

2.5.3 POST TESTING STAGE

To consolidate reliable data on the implementation of this particular training, a post-test was administered to all the individuals belonging to the treatment group and to the control one. The post-test's structure and contents, as well as the administration method were equal to the pre-test.

The post-test was aimed at measuring how successful the subjects achieved the objectives from the treatment phase as well as measuring the evolution of the control group without the special treatment received by the treatment group.

2.6 PROCEDURES

For the present study the following different procedures were held out along each one of the research stages. They are presented as follows.

2.6.1 THE PRE-TEST

In order to define the scope of the students' current phonological awareness a test focused on Phonological Awareness skills was applied to a group of 29 students from the fourth semester of the English Language Program. The test was administered during the first week of the academic term in a single session. It was a computerized test, which presented the four sets of 30 items in a random fashion. The students were supposed to finish the test in an hour.

2.6.2 TRAINING

In characterizing the pre-test results, a subsequent period of intensive Phonetic training was attained. Particularly, expanding on aspects about theoretical considerations on prosodic features of the English language such as stress, rhythm and intonation, which were followed by practical reinforcement through sets of diverse tasks, that target the development of the phonological awareness features that were assessed in the pre-test of the present study.

The training phase lasted sixteen weeks; it provided the participants with converging concepts to strengthen their aural perceptive skill. Such explicit instruction was provided two-hours a day, two days per week. Meanwhile, the subjects in the control group received the standard Phonetics and Phonology class, leaving aside the specific visual based training in suprasegmentals, the classes were structured targeting one single topic for both groups, but with different delivering as stated in the lesson plans. See annex 7. The table below states the Phonetics features considered while training.

Table 1. Structure of training sessions

Concept	Topics	Target:
Intonation	Intonation Types (rising, falling, dipping, peaking).	Sound pattern memory
	Intonation uses (informational, grammatical, illocution, attitudinal, textual, indexical).	
	Intonation levels.	
Stress	Levels of Stress.	Sound pattern memory Syllable segmentation
	Vowel reductions (Schwa).	
Rhythm	Stressed-timed vs. Syllable-timed languages.	Sound pattern memory
Linking	Linking rules and practice.	Word segmentation

Concept	Topics	Target:
Segmental Properties	Places and manners of articulation	Phoneme Identification

To urge students' language activation of their phonological awareness, the stimuli used in the all the tasks were tokens produced by multiple native speakers from different origins and dialects from all over the world. The essential point in this motive was to comply with the principle of exposing the subjects to the maximum possible amount of utterances from native speakers of the target language so that learners could identify and dissociate resembling sounds. Therefore, the tokens were produced by English native adults, male and female speakers.

2.6.3 THE POST-TEST

The post-test's procedures were identical to the ones carried out in the pre-test stage. It was administer to the same 29 students, the ones from the treatment group and the ones from the control as well. It was administered in the same computers room, using the equal amount of time than in the pre-test.

4. DATA ANALYSIS

This chapter deals with the data analysis of the results from the tests carried out to verify the research hypothesis. The effect of the training phase evaluated the four categories: Phoneme identification, Word Segmentation, Syllable Segmentation and Sound Pattern Memory. During the process of data analysis, the software Statistical Package of Social Sciences (SPSS v.21) was used to analyze the data.

3.1 PRE-TEST DATA ANALYSIS

The pre-test was applied to all the 29 students from the treatment and the experimental group, the general results showed that 15 students, which accounts for 51,7% of the group, scored under 60%, from the remaining 48.3%, just 4 students scored over 70%. The data is represented in the next table.

Table 2. Overall results data

Score (%)	Frequency	Percent
45	2	6.9
46	1	3.4
48	1	3.4
49	1	3.4
50	2	6.9
52	1	3.4
55	1	3.4
56	1	3.4
57	2	6.9
58	3	10.3
62	1	3.4
63	2	6.9
65	5	17.2
66	2	6.9
70	1	3.4
72	2	6.9
73	1	3.4
Total	29	100

The overall results outlined above suggest that fourth-semester students are doomed to have a poor performance in English, depicting a conspicuous failure in their learning process. Such avowal is based on the evidence that more than one half of the group scored below the established pass mark of 60%.

When considering the results of each one of the four categories, it is pertinent to mention that the data suggest a similar state of underdevelopment in the sub-skills related to segmentation not only at the sounds level, but for the syllabic and word level as well. One probable cause of this shortcoming would be the absence of the student's awareness related to the features of the language that are directly related to the listening micro-skills, it is also likely that this situation is result of the current way of language instruction that systematically neglects listening active instruction.

On the other hand, the scores related to the sound pattern memory present a slight increase, although they are still in need of improvement for reaching optimal levels of listening competence. The data for each one of the categories is represented in the next table.

Table 3. Results by category

Phoneme Identification	Word Segmentation	Syllable Segmentation	Sound Pattern Memory
42	48	43	47
40	50	45	49
45	48	47	52
49	51	49	47
48	52	48	52
53	54	49	52
53	56	55	56
54	52	58	60
51	60	57	60
54	58	61	59
63	59	63	63
63	63	63	63
65	65	65	65
66	66	66	66
69	71	66	74
69	74	71	74
73	73	73	73

3.2 POST-TEST DATA ANALYSIS

The post-test was applied to all the 29 students from the treatment and the experimental group, the results showed a significant reduction of the number of students that scored under 60% in relation to the pre-test, only 6 students, which accounts for 20,6% of the group. From the remaining 24 students, 13 scored over 70%, as shown on the next table.

Table 4. Post-test data

Valid	Frequency	Percent
55	1	3.4
56	1	3.4
57	1	3.4
58	2	6.9
59	1	3.4
60	1	3.4
62	1	3.4
65	4	13.8
66	3	10.3
67	1	3.4
70	4	13.8
71	1	3.4
72	3	10.3
73	1	3.4
75	3	10.3
79	1	3.4
Total	29	100

The post-test data presented a considerable improvement in the group as a whole, with the scores increasing in all the participants, undoubtedly as result of the training sessions.

3.3 VERIFYING RESEARCH HYPOTHESIS:

The hypothesis stated that: “Listening micro-skills can be fostered by the use of visual based prosody training as an initial advancement of the development of the Listening skill”, in order to verify this hypothesis the data collection instruments were administered to all the students, The scores obtained from the pre and post-test were compared. The results revealed that in the pre-test stage the results from the two groups did not differ significantly, the overall mean were 60.86 for the treatment group and 57.35 for the control, as indicated in the table below.

Table 5. Pre and Post-test comparison

		Treatment	Control
Pre-tests	Mean	57.35	60.86
	St Deviation	8.12	8.67
Post-test	Mean	60.66	67.35
	St Deviation	7.7	5.93

4. CONCLUSIONS AND FINDINGS

This chapter deals with the conclusions to which the researcher has come as the result of the data analysis; and also, with the ones discerned along the unfoldment of the phases of this study. In essence, the current study directly addressed the role of real time visual feedback of Acoustic Analysis Software on the development of a set of listening micro-skills (stress, rhythm, and intonation) grouped as phonological awareness. It also deals with some remarks about teaching listening and indicates some suggestions and recommendations for further research.

Through the development of this study, it was evident the relevance to understand the complex processes involved in the attainment of the listening skill of a foreign language and, therefore, the significance of finding teaching strategies which bring scaffolding to such particular issue. Thence, the pressing need to understand listening as a skill, which comprises both the comprehension and the decoding of a message; and also to provide a more active role to this perceptive skill in current classroom practices.

Along this study was also patent the need of opening room for listening instruction, bearing in mind the relevance of setting apart teaching listening and practicing listening. Particularly, this study deals with both the notion of becoming aware of

language learners' needs, and making them aware of those flaws as well. One starting point, therefore, it was the promotion of practical strategies that strengthened specific listening flaws to convey communication. This learning shortcoming poses a scenario where language teachers need to reflect upon the aspects that may interfere with the optimal development of the skills measured; and particularly, it is a call to discern the ways of instruction that might have resulted in specific failures related to listening, and to look for befitting teaching practices which overcome those far-reaching aspects of the language.

Specifically, in the field of listening development, teachers' need to be aware of the cognitive processes students undertake to attain listening, its role in communication, and the necessary teaching strategies to address learners' particular listening flaws; whereas language learners' need to develop phonological awareness to overcome foreign language pitfalls. It is also relevant to mention that such teaching and learning mindset should be introduced throughout the different stages learners face along the different levels of language acquisition.

Discernibly, the aforementioned notion was ascertained when the students from the treatment group improved their ability to cope with the tasks, which included a variety of features of the language directly related to listening micro-skills and to phonological awareness. Even though, all of the students did not achieve an excellent performance their progress was evident throughout all the instruments applied.

The considerable difference between the post-tests scores from the treatment group (M=67.35, SD=5,93) and the control group (M=60.16 SD=6.2), strongly suggests that the group that received visual based instruction on suprasegmentals features of the language performed better than the control group, who received regular class instruction in the same topics. These results are a strong indicator that the use of visual feedback benefits phonological awareness development.

It can, therefore, be asserted that if the teacher sets specific language instruction based on learners' listening flaws and make them aware of their distinctive constraints, student's language performance improves as well. In this case, the lack of use of correct patterns of stress, rhythm and intonation diminishes the decoding of a message, and therefore, fails its comprehension. Indeed, the distinguished elements set apart from regular classroom practice were 1) the students' phonological awareness 2) their exposure to a high range of variability phonetic training, and finally 3) the use of visual feedback to monitor native

language production, and therefore to have a domain in social interaction as the use of language promotes.

Further research on this topic may be directed to the development of practical classroom techniques that would take advantage of the use of visual stimulation for raising language awareness as well as the importance of fostering listening micro-skills as part of the integral development of this aural perceptive skill.

5. RESEARCH IMPACT

The result of this research contributes to the field of listening research, which lacks theoretical and practical attention. The outcomes from this study supports the idea that listening micro skills can be fostered by using visual feedback stimuli resulting in better comprehension, which may result useful not only for regular instruction but for addressing exceptional difficulties of specific students in a field that lacks ready to use classroom tools.

The results from this study also point to the importance of considering the complex processes involved in the listening skill, in order to achieve optimal levels of development in this generally disregard ability and the definite impact it has on the communicative competence.

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Annexes

Annex 1

Phonological Awareness – Word Segmentation

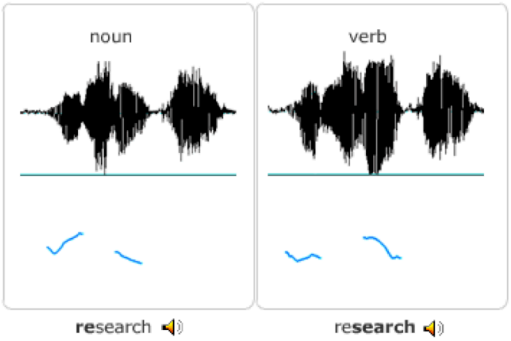
Listen and write the number of word in each utterance:

1. /ajləvərəlɑt/ ____
2. /arəmənhərsard/ ____
3. /hizəfrendəvɪm/ ____
4. /ɪzðətfərhɪərərtəgəʊ/ ____
5. /həvəlɪtˌfeɪθɪnmi/ ____
6. /bətɪtsnɒtðəkeɪs/ ____
7. /fərðəseɪkəvðəɑrgjumənt/ ____
8. /ɪtslaɪkəfɪŋgərpɔɪntɪŋtəðəmun/ ____
9. /nɒtiːvəˌnənɒpʃˌnfərmi/ ____
10. /ɪtsnɒtðəbestpɒləsi/ ____

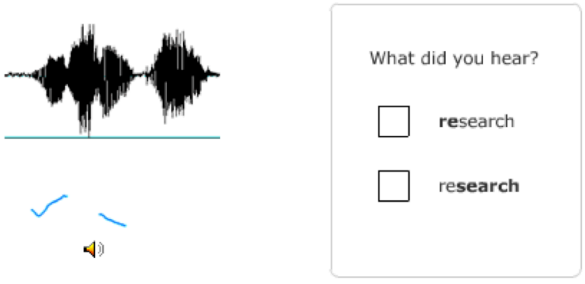
Annex 2

Phonological Awareness – Sound Patter Memory

Practice screen



Exercise screen



Annex 3

Phonological Awareness – Syllable Segmentation

Listen and write the number of syllables for each word:

11. Basket _____
12. Bedroom _____
13. Kite _____
14. Bag _____
15. Carpet _____
16. Computer _____
17. Sunflower _____
18. Fantastic _____
19. Helicopter _____
20. Sometime _____

Annex 4

Phonological Awareness – Phoneme identification

Listen and circle the word you hear:

21. Day They
22. Half Have
23. Vowel Bowel
24. Bye Pie
25. Tinker Thinker
26. Bus Buzz
27. He´s His
28. Juice Jews
29. Bat But
30. Fool Full

Annex 5

Sample of results from the Stress identification task

```
item [1]:
    class = "Results"
    name = "4_Eng_StressID"
    numberOfTrials = 1
        result [1]:
            stimulus = "E4_6d"
            response = "s"
            goodness = 0
            reactionTime = 9.463356488746296
        result [2]:
            stimulus = "E4_12s"
            response = "d"
            goodness = 0
            reactionTime = 12.614657404505358
        result [3]:
            stimulus = "E4_5s"
            response = "s"
            goodness = 0
            reactionTime = 12.523253887499102
        result [4]:
            stimulus = "E4_10d"
            response = "d"
            goodness = 0
            reactionTime = 9.263455967089346
        result [5]:
            stimulus = "E4_11s"
            response = "s"
            goodness = 0
            reactionTime = 11.439771251125617
        result [6]:
            stimulus = "E4_8d"
            response = "s"
            goodness = 0
            reactionTime = 9.170726683071436
        result [7]:
            stimulus = "E4_7d"
            response = "s"
            goodness = 0
            reactionTime = 9.843172794687785
        result [8]:
            stimulus = "E4_9s"
            response = "s"
            goodness = 1
            reactionTime = 4.988928727472274
        result [9]:
            stimulus = "E4_13s"
            response = “s"
            goodness = 0
            reactionTime = 8.323665656001307
        result [10]:
            stimulus = "E4_14s"
            response = "d"
            goodness = 1
            reactionTime = 9.802560412751927

Subject [Polo1] Result [2] out of [10] stimulus =random Reference=StressID
```

Annex 6

surveymonkey.com

Listening Micro-Skills

1. The purpose of this survey is to gather information about attitudes and knowledge related to the listening micro-skills. The procedure involves filling an online survey that will take approximately 5 minutes. Your responses will be confidential.

If you have any questions about tthis survey, please contact Raul Erazo raul-erazo@hotmail.com

ELECTRONIC CONSENT: Please select your choice below.

Clicking on the "agree" button below indicates that:

- **you have ready the above information**
- **you voluntarily agree to participate**
- **you are at least 18 years of age**

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

Agree	Disagree
○	○

Sig.

Listening Micro-Skills

Are you familiar with the concept of Listening Micro-skills?

Yes	No
○	○

Ant. Sig.

Desarrollado por SurveyMonkey
¡Cree su propia encuesta gratuita en línea ahora!

Listening Micro-Skills

Would you include Listening Micro-skills instruction in your class?

Yes	No
○	○

Ant. Sig.

Desarrollado por SurveyMonkey
¡Cree su propia encuesta gratuita en línea ahora!

Annex 7

<table>
<tr><td colspan="2">LESSON PLAN</td></tr>
<tr><td>TOPIC:
Stress Based vs. Time Based utterances</td><td>TARGET:
Sound pattern memory</td></tr>
<tr><td colspan="2">LEARNING OBJECTIVES:
- Been able to dissociate the rhythm structure of SB and TB utterances.
- Understand the implications of SB and TB languages in ELT.</td></tr>
<tr><td colspan="2">LEARNING TASKS</td></tr>
<tr><td>Control Group</td><td>Treatment Group</td></tr>
<tr><td>-Presentation of the subject.
-Group discussion about SB/TB.
- Oral practice of utterances.
-Group discussion about SB/TB implications.</td><td>-Presentation of the subject.
-Visual identification of stress patterns.
- Selecting the correct visual pattern for different recording utterances. (real time feedback).
-Group discussion about SB/TB implications.</td></tr>
<tr><td colspan="2">RESOURCES</td></tr>
<tr><td>- Regular Classroom setting</td><td>- Computer Lab setting</td></tr>
<tr><td>- Phonetics Textbook</td><td>- Acoustic Analysis Software (Praat)</td></tr>
<tr><td></td><td>- Acoustic Analysis Software (Wasp)</td></tr>
<tr><td></td><td>- Token Randomizer software (Worken)</td></tr>
</table>

Annex 8

Training Stage Control Group Class sample

Rising Intonation
Questions that can be answered with a "yes" or "no" answer (often referred to as "yes/no questions")usually end in rising intonation. The voice tone goes up at the end of the sentence.

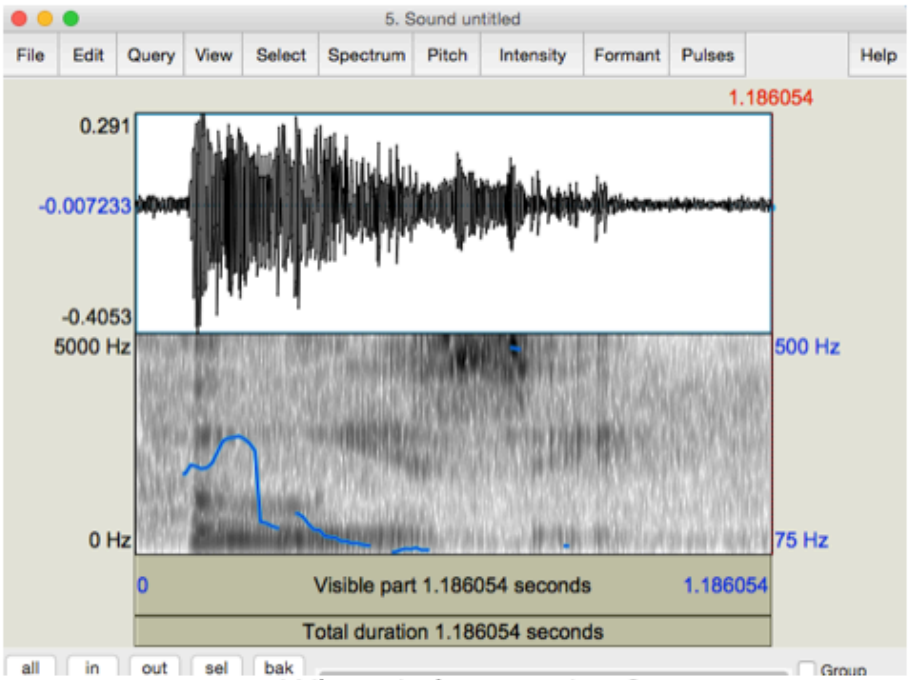
Is he coming?

Falling Intonation
Questions that begin with who, what, when, where, why, which, and how (often referred to as "wh- questions") usually end in falling intonation.

When is he coming?

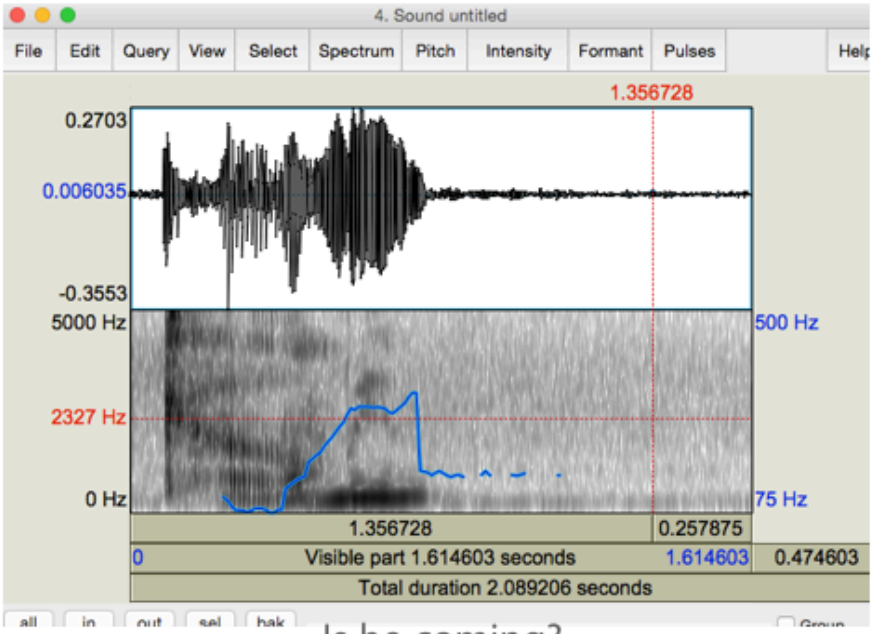
Annex 9

Training Stage Treatment Group Class sample



When is he coming?

Training Stage Treatment Group Class sample



Is he coming?