

# OPTIMIZATION OF TIME IN CLASSROOM LISTENING COMPREHENSION ACTIVITIES

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67

## 1. Introduction

Deficiencies related to listening comprehension, which in formal education is normally taught through listening activities, have led teachers to practise such activities in the classroom on a regular basis. Listening activities have taken on a central role in language learning (Rubin 1994; Zhang 2012) and using them in the classroom is thought to be essential, because the understanding of oral texts in a foreign language, in this case English, is considered to be a previous step to communication, the final goal pursued in the teaching-learning process. Listening activities are also relevant in EFL environments because a key difference between those learners who are more and those who are less able to use them as a means of acquisition (Kurita 2012). Listening activities can help the learners to succeed by increasing comprehensible input (Kurita 2012) and play a critical role in communication and in language acquisition (Vandergrift 1999), especially given that adults spend 40-50 percent of their communication time listening (Miller 2003; Latifi, Youhanaee and Mohammadi 2013). They are also important for reading comprehension, as has been shown in research in which children were found to lack adequate reading comprehension skills due to deficient listening comprehension skills (Hogan, Adlof and Alonzo 2014).

It is assumed that getting used to listening to oral discourse provides better oral comprehension and learning (Sánchez, Diego and Alonso 2010). There are two

views of listening which “lead in different directions for classroom pedagogy” (Kurita 2012: 32). The first one (learning to listen) has to do with learning to understand spoken messages, and the second one with learning the syntax and the lexis of the language through listening (listening to learn). In formal education teachers should promote both: the understanding of spoken messages and also the learning of the foreign language (Rost 2002; Richards 2008). Depending on the level of the students, it may be advisable to focus at a given moment on one of these goals or on the other, with the purpose of motivating students and creating a relaxed atmosphere. Since it is difficult to develop comprehension and acquisition skills in foreign language teaching (Kurita 2012) where students have limited opportunities for regular long-term oral communication with native speakers, teachers should provide exercises within the classroom to promote oral comprehension. For these tasks they should take into account a number of basic factors, such as the length of the oral text and the degree of understanding required (Nunan and Lamb 1996). Since some researchers have found (Chang and Read 2006, 2008; Kurita 2012; Nosratinia, Ghavidel and Zaker 2015; Ratebi and Amirian 2013) that listening support in tasks enhances the learners’ use of metacognitive strategies<sup>1</sup> in listening comprehension, they usually advise textbook writers to include the following: information about the topic so that learners can grasp detailed information; a warm up activity before listening to prepare the students for what is coming next; and vocabulary instruction, though this is the least useful form of support (Chang and Read 2006). They should also specify whether the questions are to be answered in small groups, pairs, or necessarily have to be answered individually. All these aspects can help students to learn and understand their own learning process.

Moreover, teachers should keep in mind the findings of cognitive research into the listening comprehension process since they can enhance comprehension (e.g. elaboration and inferencing). Many researchers have concentrated on bottom-up or top-down processing in listening comprehension (Lynch 2006; Morley 1991; Moskovsky, Jiang, Libert and Fagan 2015; Richards 2008; Rubin 1994; Vandergrift 2007)<sup>2</sup>. As listeners create a mental representation of what they have listened to they use both linguistic knowledge (e.g. sounds, phonemes, grammar, etc.) and their knowledge of the world, and sometimes are able to predict what is likely to come next. To achieve a successful comprehension, students must become aware that they don’t need to understand every word or idea (Peñate Cabrera and Bazo 2002; Osada 2004). This will help them to avoid overloading their short term memory (Latifi et al. 2013) and losing resources, thus favouring integration, the parallel interaction between bottom-up and top-down processing (Buck 2001; Flowerdew and Miller, 2005). One process or another will prevail depending on the purpose, the type of background that the task requires and the degree of

familiarity with the topic (Brown and Yule 1983; Richards 1990). It is likely that the participants in this research, B2.1 level students (*Common European Framework of Reference for Languages: Learning, Teaching, Assessment*, 2011), will pay more attention to the top-down process, as it is less automated and requires more resources for information retrieval (Osada 2004; Zhang 2012; Miller 2014; Moskovsky et al. 2015).

Cognitive and linguistic factors should be considered, but so should affective factors too, since they significantly influence oral comprehension. Students sometimes encounter unknown vocabulary, fast delivery, confusing exercises, etc. and all these difficulties generate anxiety in the students. As Kurita (2012: 37) recognizes "... the listening process is easily disrupted by anxiety and separately, listening tasks themselves may cause listening anxiety." To reduce anxiety students should become familiar with strategies related to the control of resources, time and effort. Working in class with oral activities that motivate students, another important affective issue, is a must for developing oral comprehension and more autonomous language learning (Aponte-de-Hanna 2012). Not only should the choice of topics be appropriate to the students' level and interests, but the methodological procedure should also be carefully planned in terms of the time that is going to be spent on administering the listening exercises. The development of the listening skill should be consistent with the time spent on it. That is, the benefit from using a listening exercise in class should be related to the time employed in the activity. It is very important to check whether there is a direct relationship between progress made and time spent on the listening task; whether adequate understanding, depending on the format of the exercise requested, is related to the number of readings of the text; and whether oral comprehension, depending on the number of readings heard, is affected by the format of the exercise.

After considering the psycho-pedagogical principles and comprehension problems that students learning English as a foreign language show in our EFL classes, we decided to investigate two important aspects, which led to the two hypotheses of this study related to the time spent on each activity and the type of exercise.

One of the main goals was to check the number of times that our students needed to listen to oral texts in class to achieve optimal understanding with optimal economy of readings. Normally textbooks point to three times as the minimum number (e.g. "The first time you hear the recording ... The second time you hear ... Make your final choice of answer, using any notes ..." *First Certificate. Masterclass*. Haines and Stewart 2008: 15). It is quite possible that at a certain level, such a procedure is unnecessary. An adequate level of vocabulary and language (Mehrpour and Rahimi 2010), due to reading (Bilican, Kutlu and

Yildirim 2012; Kutlu and Aslanoglu 2009), along with effective (Rahimi and Katal 2012) and metacognitive strategies (Goh and Yusnita 2006; Selamat and Sidhu 2013; Nosratinia et al. 2015) will produce a high performance in listening. Therefore, it is hypothesized that our students will probably need to listen to the oral text fewer times in their formal training program in order to render the same performance.

Another important goal was to check the possible difference between the two types of exercise: fill-in-the-blanks versus multiple-choice. As Kurita indicates (2012), the listening comprehension task has its difficulties for students and being aware of this fact may afford an opportunity to make listening exercises more effective. Investigating the type of exercise used in oral comprehension can provide useful insights into teaching listening. Therefore, we hypothesize that a listening comprehension activity with multiple choice exercises, where answers are related to the recognition of the information requested, is easier and more suitable for comprehension than where recall is necessary, as in the case of fill-in-the-blanks exercises. This hypothesis finds its theoretical justification in research outside the scope of listening comprehension in a foreign language, in which researchers have found that recognition involves less difficulty than recall (Anderson and Bower 1972; Carpenter 2012; Cousins 2010; Hashemzadeh 2012; Kahana, Rizzuto and Schneider 2005; Simkin and Kuechler 2005; Smith and Karpicke 2014; Sonbul and Schmitt 2010). We believe that this difference will be maintained and will work in the same way in oral comprehension in a foreign language. Confirmation of this hypothesis will serve to dictate the type of exercise which could be used to assess oral comprehension and, accordingly, the need to spend more or less class time on it.

With these ideas in mind we launched two research questions for B2.1 level students. They are:

- (i) Does training have any statistically significant effect on EFL learners' listening comprehension?
- (ii) Does the type of exercise make any statistically significant difference in listening comprehension performance?

It was expected that the results of this empirical investigation would provide useful information for proper time management and for deciding on the right type of exercise to be used in classroom oral comprehension activities. Such information would lead to a better use of time and a better selection of exercises, and most likely would provide high quality training in oral speech comprehension. This can be achieved by choosing the type of exercise that is easier and most effectively transmits the same information. Thus the unnecessary minutes used on listening comprehensions, if that is the case, can be devoted to other oral activities. The information derived from the data will lead to the development of satisfactory comprehension skills.

## 2. Method

The proposed activity involved the regular practice of classroom listening activities with B2.1 level EFL students. The aim was to check whether exposing the students to listening comprehension activities (a different number of times), in the three groups used in the research, would help identify the optimal number of readings needed and also provide information about the cognitive difficulty (recognition versus retrieval of information) encountered by the student, depending on the type of information required for comprehension. It was thought that the difficulty would in all likelihood be closely related to the number of times students listened to the oral texts.

### 2.1. Design

We conducted a Pretest/Posttest quasi-experimental design. It is a quasi-experimental design because the training (one, twice, or 3 times) with different types of exercises was applied randomly to the entire group. The oral tasks were designed as regular classroom activities rather than being presented separately and the results for every listening task were checked regularly so that the experiment could be discontinued in the event of notable differences being found due to the number of times the students had listened to the oral text.

First of all, a listening comprehension exercise was carried out in the three groups of students (Pretest). They were allowed to listen to the oral text three times before answering questions related to the content. At the end of the time allotted for the Training, coinciding approximately with the end of the semester, a similar comprehension test was given following the same procedure (Posttest). The degree of difficulty and type of questions, decided by two teachers who had nothing to do with the research, were similar in the Pre- and Posttest (98% agreement).

In the Training phase we used explicit practice, that is, “practice where the person is striving towards a goal, and receives frequent, accurate feedback from an instructor” (Murray 2006: 2). This consisted in listening to the oral texts once (first group), twice (second group) or three times (third group), respectively, with the same pre-listening activities and practice of unfamiliar vocabulary in each group. As in the case of the Pretest and the Posttest, the degree of difficulty of the two training trials, judged by the same two teachers, was similar (97%).

To test the first hypothesis, the data from the subjects, obtained with a matching exercise in the Pretest and in the Posttest, were compared. All the groups in the Pretest as well as in the Posttest listened to the oral text three times. In the Training phase, which served to test the second hypothesis, participants listened to six

different oral texts (one in each session) 1, 2 or 3 times. They had to complete either fill-in-the-blanks or multiple-choice exercises so that the Posttest results would not be affected by the type of exercise recently practised (fill-in-the-blanks or multiple-choice).

To ensure reliability in grading an instructor who had nothing to do with this research graded the Pretest (matching exercise), Posttest (matching exercise) and the Training phase (fill-in-the-blanks and multiple-choice exercises). The same teacher administered all these tests in order to maintain consistency in the procedure followed.

## 2.2. Participants

The research was conducted during the first semester of the academic year with three groups of EFL students (B2.1 of the *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*, 2011). At the time of the research the participants, who were Spanish speakers, were enrolled in the subject “English Language I” in the first year of the degree course in “English Studies” at the University of Salamanca.

72

The Pretest was carried out during the second week of the term and the participation in each group was: 34, 28 and 45 students. The Posttest took place at the end of the term: in one group there were 25 students while in the other two the participation was 29 and 31, respectively. As we were dealing with repeated measures and also the fact that some students did not participate in the Training phase, the data from all those who had failed on more than one occasion (16.66%) were eliminated. This was done because what was being checked was whether the number of times an oral text is listened to affects the comprehension skill, data that would be reflected in the Posttest. We therefore ended up with a total of N=17: 12 females (F), 5 males (M) participants in the first group, N=16 (9F, 7M) in the second and N=18 (16F, 2M) in the third.

In the Training phase (different treatment: 1, 2, 3 times), for the fill-in-the-blanks exercise we had 15 (11F, 4M), 15 (9F, 6M) and 16 (14F, 2M) students, and in the multiple-choice exercise the number of participants was 17 (12F, 5M), 16 (9F, 7M) and 18 (16F, 2M). As for the comparison of results in the Training Phase (a paired intra-group test: fill-in-the-blanks or multiple-choice) we had to have the same students, the number of participants was reduced to 15, 15, 16. We did not use the same figures in the between/intra tests due to the small number of students available. Working with the same numbers would have involved an undesirable decrease in the number of participants.

## Optimization of time in classroom listening comprehension activities

<i>Listening</i>	<i>Pre and posttest</i>	<i>Fill-in-the blanks</i>	<i>Multiple-choice</i>
Once	17 (12F, 5M)	15 (11F, 4M)	17 (12F, 5M)
2 times	16 (9F, 7M)	15 (9F, 6M)	16 (9F, 7M)
3 times	18 (16F, 2M)	16 (14F, 2M)	18 (16F, 2M)

Table 1. Participants' data: size of the sample and gender.

In the Pretest, Posttest and Training phase, the students participated without being informed that the results would be used for research. Nothing was said about this because we did not want them to think these oral comprehension exercises were unrelated to the class and therefore not important.

### 2.3. Materials

The materials used were taken from the first part of the textbook *First Certificate. Masterclass* (Haines and Stewart 2008) and all of them were almost at the same level of difficulty according to two instructors who had nothing to do with the research. In the Pretest and Posttest, the listening comprehension was tested with a matching exercise, where the student had to listen to the recording three times and decide afterwards what each of the conversations was about. The data obtained were used to check the first hypothesis.

In the Training phase students practised listening comprehension (once, twice, or 3 times) with different types of exercises such as: multiple-choice (2), fill-in-the-blanks (2), multiple choice with open questions (1) and fill-in-the-blanks with open questions (1). The purpose was to get students used to discerning the suitability or unsuitability of the different possibilities offered (multiple-choice), remembering details from the oral text (fill-in-the-blanks), and generating information using their own words (open questions). We decided not to consider the last type in our research because, despite its relevance, it was not always clear whether the students' responses had to do with their limitations in comprehension or in self-expression.

To check the second hypothesis, we analysed the data obtained in the Training phase. For this purpose we used the results of multiple-choice and fill-in-the-blanks exercises conducted in the same week (approximately at the end of the semester). In this way we had data from the beginning of the semester (Pretest), mid-semester (Training), and the end of the semester (Posttest). As one of the research objectives was to address the reliability of multiple-choice versus fill-in-the-blanks exercises, we decided not to mix them with open response exercises that could mask the results.

### 3. Results

The results, as expected, yielded no significant difference between groups in either the Pretest:  $F(2, 48)=3.085$ ,  $p=.0549$ , or the Posttest:  $F(2, 48)=2.03$ ,  $p=.1425$ , which confirms the first hypothesis. The different training exercises over the semester (once, twice, or 3 times) did not help the groups who had listened to the oral text a greater number of times to do better than those who had received less training (fewer times). The fact that the intra-group comparison (Pretest/Posttest) showed a significant difference in all groups (paired  $t$ -test with the group who had listened to the oral text three times) does not invalidate the previous results:

$$t(16)=2.256, p=.0384$$

$$t(15)=2.455, p=.0268$$

$$t(17)=2.342, p=.0316$$

The fact that students learned over the semester was most likely due to the work done in class with different listening activities and other activities that could not be controlled in this study, such as written activities (Bilican et al. 2012; Kutlu and Aslanoglu 2009), lexical learning (Mehrpour and Rahimi 2010) or the development of more effective strategies (Rahimi and Katal 2012; Selamat and Sidhu 2013).

In regard to the second hypothesis, the data for the multiple-choice exercise showed no significant difference between groups with different training (once, twice, or 3 times):  $F(2/48)=.733$ ,  $p=.4864$ , and neither did the data for the fill-in-the-blanks exercise:  $F(2/43)=1.685$ ,  $p=.1974$ . These data, although obtained from exposing the students to the listening comprehension activity a varying numbers of times, replicate and confirm the first hypothesis. Comparison of the intra-group data with the two types of exercises confirms the second hypothesis. As expected there was a significant difference in the Training phase:

- Group in which the oral text was listened to once:  $t(14)=2.71$ ,  $p=.0169$
- Group in which the oral text was listened to twice:  $t(14)=2.46$ ,  $p=.0275$
- Group in which the oral text was listened to three times:  $t(15)=2.359$ ,  $p=.0323$

This difference occurred due to the difficulty that remembering entails, probably because of the numerous cognitive resources needed, as compared to recognition. As can be seen in this study, this also seems to hold true for oral comprehension in a foreign language. The significant difference is easily visualized in the graph shown in Figure 1 in which the averages of the groups are compared. It can be observed that the average of the participants who had done a multiple-choice option exercise is always higher than the one obtained by the students who did a fill-in-the-blank exercise (6.42/3.80, 8.33/5.61, 8.33/6.3). The results allow us to infer that this type of exercise is easier for EFL students in a listening activity.

#### 4. Discussion

One result of this research is that it indicates the optimal number of times that a listening activity should be listened to when dealing with B2.1 level students, thus saving valuable class time.

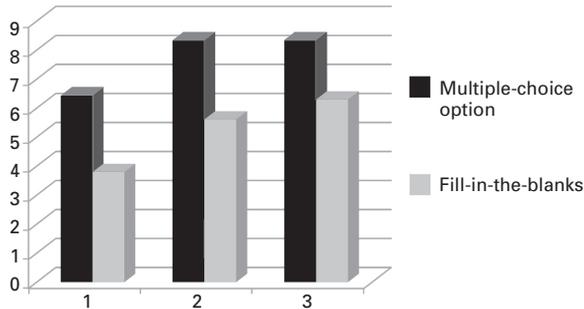


Figure 1. Average score (vertical axis) when the listening exercises (multiple-choice, fill-in-the-blanks) are done once, two, or 3 times (horizontal axis).

Bearing in mind the non-significant difference between the groups that were exposed to the oral text (3 times) in the Pre/Posttest, we conclude that listening to oral discourse fewer times did not prevent students from reaching the same comprehension level as those who had listened two or three times (Training Phase). These results would probably be similar at higher levels. This most likely occurs because of a greater use of the top-down process (Moskovsky et al. 2015), and also because these students use and employ listening strategies more effectively than lower level EFL listeners (Ratebi and Amirian 2013; Miller 2014), an idea also shared by Goh (2002) and Iwai (2010) when they talk about cognitive and metacognitive tactics. Nonetheless, listening to an oral text more than once can make a big difference with oral comprehension at lower levels, probably because students at this stage are more prone to use the bottom-up process. This may be precisely because they do not master listening strategies, which produce good results with beginning (Guan, 2014) and intermediate level listeners (Zhang 2012).

All the groups in the study improved their comprehension regardless of the treatment they were exposed to, as shown in the significant intra-group difference: Pretests, Posttests, and Training phase (multiple-choice and fill-in-the-blanks). Nonetheless, the data suggest the futility of wasting time unnecessarily on repeating a listening activity (2 or 3 times) at this level. Our students did not need to listen

more than once to attain the same performance at comprehension. Probably, there is always scope to increase one's knowledge and become more competent in the listening comprehension skill. Therefore, after listening to the oral text once, interesting questions can be answered in groups with the purpose of enhancing speaking skills at the same time (e.g. debate).

The results found in relation to the second hypothesis, even when training conditions were different (once, twice or 3 times) replicate those of the first hypothesis, since there is no significant difference between groups when the participants perform the same type of exercise but with a different exposure. The second working hypothesis is confirmed, with the significant difference obtained in an EFL listening comprehension environment for the two types of exercises: multiple-choice option exercises as opposed to fill-in-the-blanks. This conclusion is consistent with the literature which points to recognition exercises as being easier than those in which memory is involved (Anderson and Bower 1972; Carpenter 2012; Cousins 2010; Hashemzadeh 2012; Kahana et al. 2005; Simkin and Kuechler 2005; Smith and Karpicke 2013; Sonbul and Schmitt 2010). Though the hypothesis is confirmed, more research should be done to check which type of exercise better captures information with the same content questions and different groups of participants with the same degree of proficiency at English.

76

## 5. Conclusions

This research has important implications for educators and material developers as it points to the importance of considering how to improve listening comprehension skills and how to assess them. The main empirical results obtained in this research: a) the fact that students need to listen to the oral texts fewer times to render the same performance (first hypothesis), b) together with the usefulness of multiple choice exercises in oral comprehension (second hypothesis) are essential for teachers, since they give them information regarding the administration of listening activities and the type of exercise to be carried out in relation to the aims pursued. It is also of interest to other researchers, due to the scarcity of empirical research devoted to listening comprehension in a foreign language. Nonetheless, further research should be done with a larger sample size and other types of exercises involving recognition and memory. Thus data would be accumulated for an accurate diagnosis of the type of exercise to be used when attempting to generate a particular type of response and when it is important to know precisely what it is that is being evaluated.

## Notes

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<sup>1</sup> Metacognitive strategies are those which “involve thinking about the learning process, planning for learning, monitoring of comprehension or production while it is taking place, and self-evaluation after the learning activity has been completed” (O’Malley and Chamot 1990: 8).

<sup>2</sup> That is, focusing on listening for details (understanding at a sound or word level) or for the general meaning of a text “using background knowledge” (Richards 2008: 7)

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## Optimization of time in classroom listening comprehension activities

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