



# Effectiveness of Reading, Listening and Reading-While-Listening- Quasi-Experimental Study

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## Abstract

*At the beginning of the presentation, the author will focus on three text presentation formats that are available in the CALL (Computer Assisted Language Learning) environment- reading, listening and RWL (reading while listening). In general, assuming that reading is acquiring the meaning of a text and interpreting it correctly, reading, listening and RWL seem to be almost identical. However, when the effectiveness of these modes are compared, two different approaches can be observed. Some researchers claim that RWL is more effective than reading and listening alone. In contrast, the others affirm that RWL is more absorbing and, in effect, less effective.*

*The author will also present the results of a quasi-experimental study which aim was to check the effects of reading, listening and RWL on comprehension. The participants were the sixth graders of one of the primary schools in Opole, Poland. They were divided into two groups according to their English proficiency level. Three different text formats were applied (reading, listening and RWL) to check the differences in comprehension after each mode. It occurs that the proficiency level does matter when compared with various text presentation modes. In case of the stronger group, less differences were found when the three mentioned formats were juxtaposed. In the weaker group, on the other hand, RWL generated better comprehension results.*

*All in all, the author would like to present some theoretical background concerning reading, listening and RWL to compare it with the results of her study. Later on, some conclusions are drawn and possible explanations are shown.*

## 1. Introduction

The way a text comprehension can be enhanced is still an important subject matter for educators. It is also because the technological development made it possible to use not only traditional materials (like written or printed texts) but also electronic devices and computer programs during teaching and learning a language. Fortunately, CALL's (Computer Assisted Language Learning) methodology answers the need of adjusting teaching methods to this particular learning context, especially when a text is presented in a written as well as oral mode. It should be stressed that the role of media, and especially the Internet with its multidimensional content, has radically changed the way any information is absorbed and understood by the reader or listener. Thus, the processes like reading and listening have changed their nature and should be examined from a totally different perspective. To prove it, the author would like to start the article with a short introduction of views on the media environment as such. The term *literacy in media environment*, which is closely related to CALL and "refers to the knowledge, skills and competences that are required in order to use and interpret media" [1] p. 36, has already become a significant issue and, moreover, it has been approached from different perspectives by many researchers ([1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11]).

Living in a digital age makes our students fluent in the Internet management. This, in turn, is directly connected with the reading skill development as without this particular skill, no data from the Internet could be accessed. The ability to deal with the Internet content and the level of literacy skill of contemporary teenagers stimulated the author to conduct a research. Its aim was to examine the comprehension of texts presented in three different modes – when the text was read, listened to, and read and listened to at the same time - which was supposed to imitate the formats available in a technology-based environment. By doing it, the author tried to exemplify the effectiveness of different modes of text presentation. In other words, the author assumed that if a text comprehension is higher in one of the modes, than this particular mode is found more effective.

## 2. The study

The main objective of the research was to compare RWL method with reading and listening alone in terms of comprehension of a text. The author hypothesized that the *RWL approach is more effective*

than reading and listening alone. She assumed that this view would be proved by higher comprehension results in case of RWL approach.

The study took form of a quasi-experiment since normal distribution was observed but the groups were formed before the study took place (these were already existing classes). Moreover, as equal conditions were applied in the case of each stage of the study, the results could be measured according to the delivery mode application.

## 2.1. Participants

Sixty-six sixth graders from one of the schools in Opole, Poland, took part in the experiment. Two groups were created according to the proficiency level of English – a stronger (24 students) and a weaker one (42 students).

## 2.2. Instruments

The placement test, which was chosen for the initial part of the experiment, was a standardized language level test by which students' abilities could be indicated. The test consisted of four parts which tested listening and reading comprehension along with knowledge of vocabulary and grammatical structures.

The texts used in the study were taken from *Cambridge's Key English Test 4* and were adjusted to the presentation mode – listened and read-while-listened texts were additionally recorded before the study and later on played to the participants.

## 2.3. Procedures

The experiment started with a placement test (with total amount of points - 50). The variety of components gave a more complex idea of the participants' proficiency level of English.

Next, the effectiveness of three text presentation modes, mainly reading, listening and RWL was measured. The procedure was to become acquainted with the texts and answer comprehension questions. The format of the test was the same for all modes (open and true-false questions with maximum 20 points to be obtained). Accordingly, mode constituted the only difference.

Students had the whole lesson (forty five minutes) to write placement test. Comprehension tests administered after reading, listening and RWL took about fifteen minutes each.

## 2.4. Results

Placement test's results allowed the author to divide the participants into a stronger and a weaker group. The mean score in case of the stronger group was 33,91 while only 29,20 in case of the weaker one. The difference was statistically significant, as proved by the t-test for independent samples.

Next, the results of comprehension tests administered after each presentation mode were gathered and compared with one another. A paired comparison was computed to find out if there is any difference between the presentation modes effectiveness (see Table 1 and Table 2). Different results were observed when the weaker and the stronger groups were compared. In case of the weaker one, RWL generated better comprehension results, especially when compared to the listening task. When stronger group was taken into account, no statistically significant differences were found between the modes which means that no matter if the text was read, listened to or listened and read simultaneously, no discrepancy can be observed.

	t	Asymp. Sig (2-tailed)
RWL – Listening	2.49	0.02
RWL – Reading	2.04	0.05
Listening – Reading	-0.80	0.43

Table 1. Paired Samples Test (t-student) – weaker group

	t	Asymp. Sig (2-tailed)
RWL – Listening	-0.73	0.48
RWL – Reading	-1.14	0.27
Listening – Reading	-0.59	0.56

Table 2. Paired Samples Test (t-student) – stronger group

When it comes to gender differences, different amount of students in the groups required using U Mann-Whitney test. The mean for girls was 24.25 and for boys 19. Nonetheless, such difference is not statistically significant and therefore gender does not matter when reading, listening and RWL text presentation formats are compared.

## 2.5. Summary

It occurs that the text presentation format does enhance comprehension only for some of the students – in case of the study presented above these were the students on the relatively lower-level of English. Likewise, it may be claimed that there is a correlation between lower language level and success in RWL.

Such outcome is in opposition to the idea that RWL format decrease comprehension. Several researchers (e.g. [12], [13]) claim that lower comprehension results in case of RWL can be caused by the redundancy effect and, consequently, cognitive load theory. This phenomenon can be summarized with the statement - the more modes, the lesser comprehension.

The other issue raised in the investigation was the question of gender and its influence on comprehending texts which were read, listened to as well as read and listened at the same time. Here, no statistically significant differences across the modes were found.

Summing up, the results of experiments carried out up to this day give the impression of being unconvincing. The reason of such situation is because various perspectives are taken when examining different modes of becoming acquainted with the text. While some of the researchers tend to focus on the learning process that happens through the exposition to RWL (e.g. [14]), the others try to focus on the effectiveness of each mode (e.g. [12]). The author herself tried to find out which of the formats is the most effective when comprehension is concerned. From this point of view, RWL generates better comprehension outcomes only when a lower-level students are concerned. Thus, the question whether RWL method brings better comprehension results remains unanswered.

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