

The effect of extensive listening on developing L2 listening fluency: some hard evidence

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This study looks at the effect of developing L2 listening fluency through extensive listening to audio graded readers. A large bank of listening fluency development questions (2,064 items) was constructed based on ten Level 1 graded readers. Three groups of L2 students were engaged in one of three different input modes while studying ten graded readers over a 13-week period: reading only, reading while listening, and listening only. All participants were given one pre-test (60 items) before the intervention and one post-test consisting of three texts (180 items) after the intervention. All the passages were delivered at the same speech rate, and the participants were allowed to listen only once. The post-test results demonstrate that the reading plus listening group produced the most consistent and significant outcome compared with the reading-only and listening-only groups. The results have some implications for developing L2 listening fluency.

Introduction

Two recent articles (Siegel 2011; Blyth 2012) discuss Renandya and Farrell's research (2011) on extensive listening (EL). EL here refers to learners doing a lot of easy, comprehensible, and enjoyable listening practice such as listening to audio books or radio programmes. Due to the fact that EL is a comparatively new idea, its theoretical framework is underdeveloped; there has been little hard evidence supporting the effect of EL on improving L2 listening competence.

The present study is based upon the well-documented literature of extensive reading, and extends from this to look at the effect of EL on the development of listening fluency. Listening fluency involves listeners processing aural input automatically and also reaching a reasonable degree of comprehension. However, to reach this level in an L2 context is by no means easy, and it requires regular practice and abundant exposure to spoken language over time (Rost 2006). Although Cambourne (1981) maintains that L2 reading and listening are more similar than different, the principles of reading comprehension cannot be applied directly to listening without some modification.

In the last three decades, listening has been shown to be a set of skills in its own right. [Stephens \(2010\)](#) recently noted that L2 learners do not share the same oral foundation as L1 learners. For L1 learners, the foundation of oral skills has usually been established before literacy skills; however, for L2 learners, literacy and oral skills are normally introduced at the same time. Therefore, when implementing extensive reading or listening in the L2 context, language teachers may have to modify the approaches used in the L1 context to suit the characteristics of L2 learners. This study thus adopts a technique called linked skills ([Nation and Newton 2009](#)), which combines reading and listening skills in a number of possible ways. For example earlier reading activities can provide preparation and support for later listening activities. This may assist learners in reaching a higher level of performance in the listening activity than they would without the earlier reading activity (*ibid.*). Alternatively, reading and listening can be done simultaneously, and then followed by either a reading or listening activity, depending on which skill the learners want to focus on.

Improving L2 listening fluency through EL

Some L2 studies have demonstrated that simultaneous reading and listening is preferable to reading only or listening only ([Brown, Waring, and Donkaewbua 2008](#)) because it makes input more comprehensible. More recently, [Chang \(2011\)](#) worked with seven ESL learners who simultaneously read and listened to 28–39 audio graded readers (delivered at 160 words per minute) over a 26-week period. She found that the participants significantly improved not only their general vocabulary knowledge but also their listening fluency compared with those who did not receive the treatment. However, in [Chang's 2012](#) study with 34 ESL university students who also simultaneously read and listened to 15 audio graded readers over 26 weeks, a much smaller effect on their listening performance was found. The two studies differed largely in the quantity of input; unless L2 learners expose themselves to abundant aural input, like the seven participants who studied more than one book per week, they are not likely to improve their listening skills much. Apart from the quantity of input, the participants in the two studies simply finished the treatment with simultaneous reading and listening to the audio books, and there were no follow-up activities focusing solely on listening. The lack of this step might have reduced the effect of the intervention as some students might have over-relied on the written script and completely ignored the aural input. Thus, while simultaneous reading and listening could be beneficial to both reading and listening, if the goal is to develop L2 listening competence, 'listening should conclude the cycle because listening after reading helps learners recognize acoustically what they can already comprehend in print and instills satisfaction and confidence in listening' ([Lund 1991: 202](#)).

The study

The present study aimed to compare the development of listening skills of three groups of EFL university students in Taiwan who engaged with different input modes:

- 1 The reading only (RO) group: students read the graded readers without listening to the audio recordings.
- 2 The reading while listening (RL) group: students first simultaneously read and listened to the graded readers once, then simultaneously listened and answered listening fluency development questions without referring to the texts.
- 3 The listening only (LO) group: students did not read the graded readers, but simultaneously listened and answered listening fluency development questions.

Based on the assumption of the linked skills technique (Nation and Newton *op.cit.*) that earlier reading activities will lend support to later listening activities, as well as the findings of previous studies (Brown *et al.* *op.cit.*; Chang 2011, 2012), the hypothesis was that the RL group would have a higher level of performance than the RO and LO groups.

Participants

The participants were 113 low-intermediate EFL university students. All were taking English proficiency courses, which included a 100-minute reading course and a 100-minute listening course each week.¹ The participants were formed into three groups by the researchers. According to the pre-test scores, the listening proficiency of the LO group was higher than that of the RO and RL groups (see the pre-test scores in Table 1), but there was no difference between the RO and RL groups.

Research design

A quasi-experimental research design was adopted in the study. The RO group read ten graded readers in their reading class without listening to the audio recordings, but they received listening instruction based on a coursebook specially designed for developing listening skills. The LO group simultaneously listened and answered the listening fluency development questions without reading the graded readers, and they had another reading course following a commercially published reading coursebook. The RL group simultaneously read and listened to the ten graded readers once in the reading class. In their listening class, they listened to the same graded readers that they studied in the reading class while also answering the listening fluency development questions without reading the texts (see Table 2).

Study materials: ten Level 1 graded readers

Ten Level 1 graded readers from the Oxford Bookworms series were studied. The profiles of the ten books are shown in Table 3. Each book

	Pre-test/ post-test 1	Post-test 2	Post-test 3
Listening passage	'South for the winter'	<i>The Withered Arm</i> (Chapter 6)	<i>A Little Princess</i> (Chapter 2)
Length (words)	1,791	733	994
Speech rate (wpm)	102	103	104
Total duration (hour:minute:second)	00:17:29	00:7:06	00:9:31
Total items tested	60	43	77

TABLE 1
Summary of
the dependent
measures

	Reading only (RO)	Reading while listening (RL)	Listening only (LO)
100-minute reading class	Read 10 graded readers once.	Simultaneously read and listen to 10 graded readers once.	Study other reading materials.
100-minute listening class	Study other listening materials.	Listen to graded readers while answering listening fluency development questions without reading the texts.	Listen to graded readers while answering listening fluency development questions without reading the texts.

TABLE 2
Research design

has approximately 5,600 words and an average of seven chapters. The average audio duration of each title is 59 minutes. A total of 2,064 questions were developed. Fifty copies of each title were available because these graded readers were used as class texts. Approximately 95.42 per cent of the words are within the 2,000 word level, of which proper nouns make up 3.77 per cent. In written texts proper nouns are often considered as known words (Nation and Webb 2011). These graded readers had been used by previous students with similar learning profiles and language proficiency and were reported as being very interesting and readable.

The development of listening fluency practice questions

The fluency practice questions were developed by the second author and are used by the students in her institute in New Zealand. However, it was the first time they were used to quantify students' learning outcomes in a Mandarin Chinese-speaking context (Taiwan). The practice questions included many forms such as short-answer, yes/no, true/false, gap-fill, and multiple-choice. They were developed chapter by chapter based on each of the selected graded readers, and the

Book title	Audio duration (hour:minute:second)	No. of chapters in each book	Questions developed
<i>Love or Money</i>	01:13:08	7	247
<i>The Elephant Man</i>	00:50:36	7	151
<i>The Monkey's Paw</i>	00:41:33	7	110
<i>A Little Princess</i>	01:08:41	6	287
<i>The Witches of Pendle</i>	01:05:09	4	224
<i>The Phantom of the Opera</i>	01:00:58	10	216
<i>Remember Miranda</i>	00:51:15	5	212
<i>The Coldest Place on Earth</i>	00:59:17	9	215
<i>The Withered Arm</i>	01:03:10	6	210
<i>Goodbye, Mr Hollywood</i>	00:57:34	8	192

TABLE 3
Details of graded readers and listening fluency questions

questions follow the sequence of the storyline (a sample can be seen in the Appendix). The ten graded readers have a total of 69 chapters and each book has between five and ten chapters and between 110 and 287 questions.

Dependent measures

The dependent measures involve one pre-test and one post-test consisting of three texts (post-test 1, post-test 2, and post-test 3; see Table 1). Three texts were used in the post-test to avoid topic bias, to get more reliable results, and to see whether listening fluency gained from the practised texts could be transferred to the unpractised texts. Therefore, one unfamiliar 1,791-word story, 'South for the winter', taken from *One-way Ticket* (Bassett 2000), was used as the pre-test and post-test 1. Two chapters were randomly selected from the 69 chapters and were used as post-test 2 and post-test 3. These two texts were part of the study materials and were considered familiar to the students. One hundred and eighty questions were constructed based on the three passages with 103 being short-answer questions, 32 gap-fill, 37 multiple-choice, and 8 true/false. The speech rates of the three passages were adjusted to similar speeds by using Audacity (free downloadable software). While taking the pre-test and the post-tests, the participants simultaneously listened to the audio texts and answered the listening questions. The audio texts were played only once.

Procedure

The three groups had not experienced listening to stories or taken this kind of test before. A simulated practice test, based on another of the stories in *One-way Ticket*, was administered before the pre-test, and rubric about the test was printed on the top page of the test paper. Students were allowed to preview the questions for four minutes, then listened to the audio recording once only. After the practice pre-test, the formal pre-test was administered.

A different treatment was given to each of the groups during the 13-week period (see Table 2 for the research design). In the reading class, the RO group silently read the graded readers without listening to the audio texts. After finishing one chapter, the students stopped reading and the first researcher pointed out key issues (i.e. cultural issues) to raise students' awareness and answered students' questions. The same process was repeated throughout the treatment period. The RL group, however, simultaneously read and listened to the graded readers. Apart from this, the treatment was the same as the RO group. The LO group did not read the graded readers but received formal reading instruction based on their coursebook.

In the listening class, the RO group did not listen to audio graded readers but received formal listening instruction based on their coursebook, including a variety of listening exercises such as dictations. Both the RL and LO groups simultaneously listened to the audio texts and answered listening fluency questions. The 100-minute listening class involved many tasks, such as students checking answers for the work they completed outside the class. In addition, the instructor checked students' comprehension of the story by stopping the CD

from time to time to answer students' questions and clarify points that were not clear. Finally, the answers to the questions completed in the classroom were checked. Usually, only about one-third of each book was completed in RL and LO listening classes. The unfinished parts were uploaded to the teacher's e-learning website, so students could listen to and finish the practice questions on their own. The time students spent on doing the practice was recorded once they logged on to the website, so that the instructor could track students' learning, including the number of times they logged on and the time spent on listening to each chapter. The fluency practice questions were made into booklets for each title. When students finished one book, the practice booklet was collected. Answers were checked and corrected by students before they handed in their booklets.

After the intervention, an immediate post-test consisting of three texts was given. Post-test 1 was given first, followed by a 20-minute break. Post-test 2 and post-test 3 were given after the break. All three test procedures were consistent throughout.

Marking and data analysis

The answers to the test questions were prepared by the second researcher and further examined by the first researcher. All the test papers were marked by a senior research assistant and the first researcher. Spelling mistakes did not affect test scores. The answers to most items were specific, and a few answers that might have raised disagreement were discussed before marking. SPSS version 18 software for Windows was used to analyse the data. Due to there being four dependent measures (pre-test, post-test 1, post-test 2, and post-test 3) and one independent measure with three levels (reading only (RO), reading while listening (RL), and listening only (LO)), a multivariate analysis of variance (MANOVA) was conducted. One-way ANOVAs and *post-hoc* tests using a Bonferroni adjusted level of .01 were conducted on the dependent variables that were significant in the MANOVA.

Results

The descriptive statistics of listening test scores on the four dependent variables (pre-test, post-test 1, post-test 2, and post-test 3) are reported in Table 4. The reliability of the pre-test score was found to be satisfactory, Cronbach $\alpha = .89$. The results show that after the pre-test, (1) the RO group gained 3.07 per cent in post-test-1 and 1.20 per cent in post-test 2, but decreased 3.64 per cent in post-test 3. However, the *t*-tests show that the variations in scores from the pre-test to the immediate post-test were not significantly different; (2) the RL group increased 28.42 per cent in post-test 1, 28.18 per cent in post-test 2, and 27.70 per cent in post-test 3. The increases from the pre-test to the three post-tests were statistically significant with $p < .001$ across the three *t*-tests. The improvement was very consistent throughout the three post-tests; (3) the LO group gained 19.74 per cent, 18.56 per cent, and 13.44 per cent in post-test 1, post-test 2, and post-test 3, respectively. Although the increases from the pre-test to each of the post-tests are statistically significant with $p < .001$, the scores varied greatly from the highest 19.74 per cent in post-test 1 to 13.44 per cent in post-test 3. The overall results show that the RL and LO groups made more progress than the RO group (see Figure 1). A MANOVA, with the pre-test score

TABLE 4
Descriptive
statistics of
listening test
scores (%)

	Reading only (RO; <i>n</i> = 38)	Reading while listening (RL; <i>n</i> = 37)	Listening only (LO; <i>n</i> = 38)
Pre-test	44.87 (16.90)	46.31 (19.36)	54.17 (22.20)
Post-test 1	47.94 (21.38)	74.73 (13.84)	73.90 (17.42)
Post-test 2	46.07 (19.50)	74.48 (15.00)	72.73 (16.31)
Post-test 3	41.23 (19.88)	74.00 (18.83)	67.61 (19.43)

used as a covariant, demonstrated that different input modes produced significantly different outcomes. Pairwise comparisons show that at post-test 1 and post-test 2, the RL and LO groups scored significantly higher than the RO group; however, at post-test 3, the RL group performed significantly higher than both the RO and LO groups.

Discussion and pedagogical implications

The results of the present study indicate that when carrying out EL, the use of simultaneous reading and listening before focusing on listening only is the most effective approach in improving L2 listening fluency. Among the three groups, the comprehension results of the RL group were the most consistent and significant. The effect is limited not only to the practised passages but also to the unpractised passages as well. This means that L2 learners' listening skills gained from EL can be transferred to listening to unfamiliar passages. Across the three post-tests, the RL group was able to maintain up to 70 per cent comprehension level, which is considered satisfactory from the standard of reading fluency practice (Nation 2005). The comprehension levels of the LO group were not improved as much as those of the RL group; however, they scored 73.90 on the unfamiliar passage. Compared with 74.73 by the RL group, it seems that the LO group also had the potential to improve their listening fluency as much as the RL group. Although the RO group also read the ten graded readers and received 100-minute formal listening instruction, the effect was much less significant than the RL and LO groups receiving EL. Apart from

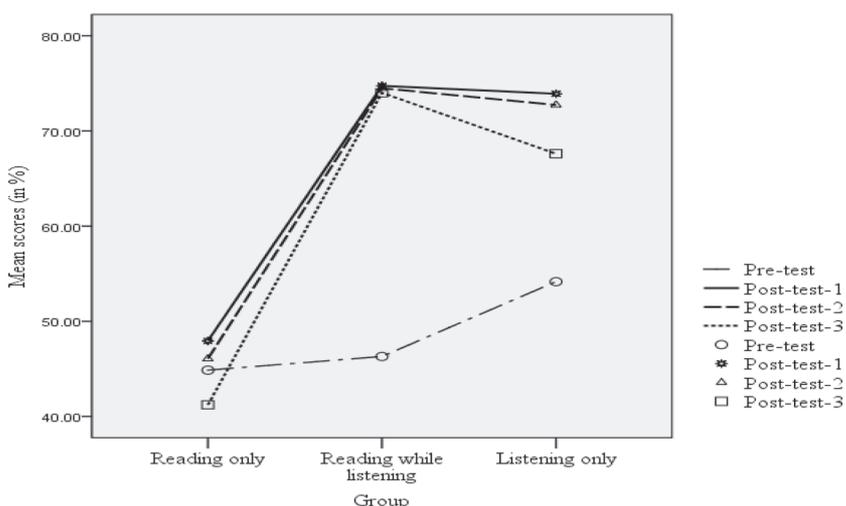


FIGURE 1
Mean scores of pre-
test, post-test 1, post-
test 2, and post-test 3

doing the listening fluency questions, another key factor in the more successful outcome of the RL and LO groups is ‘repetition’. Answering listening fluency practice questions might require L2 learners to have multiple exposures to spoken forms because many students in these two groups reported that in some areas they had to listen more than once to ensure their comprehension was correct.

The results of the present study suggest that abundant input and consistent practice are essential to improving listening fluency. However, teachers have to be cautious while implementing EL in an L2 classroom because the aural foundation of L1 and L2 learners is different. While the EL programme of the present study produced impressive results, it has to be noted that the results were not achieved easily. The programme was carefully planned and the students’ work was monitored not only in class but also outside the class. Some implications from the present study are discussed below.

Time frame

A reasonable amount of listening practice should be done within a specific time: the participants in the RL and LO groups listened to a whole book and completed around 200 fluency questions each week, which was considered an attainable goal. If students just did a small amount of listening practice each week, like the RO group, this was not sufficient for their listening fluency to develop.

Combining skills

The linking of reading and listening enhances students’ confidence: simultaneous reading plus listening before listening not only provides listeners with helpful background knowledge and reduces unfamiliar vocabulary but also motivates students to listen more carefully. As the first researcher observed, students in the RL group consistently showed higher motivation than those in the LO group to do the practice because they already knew the story scenario and had probably learnt unfamiliar vocabulary before the listening fluency practice. As Nation and Newton (op.cit.) suggest, 98 per cent of the language used should be familiar to the listeners for comprehension to take place.

Materials

Choosing interesting materials that suit students’ language competence motivates students to keep on listening. The materials used in the current study were reported to be very interesting by previous and present students. Students often came to the first researcher expressing their fondness for the stories. More interestingly, many students looked forward to receiving the listening booklets and doing listening practice. As observed by the first researcher, the students felt a great sense of achievement when they were able to listen smoothly without referring to the written texts.

Completing the listening cycle

Extended practice that solely focuses on listening is the key to improving fluency. Although simultaneous reading and listening has been found to be helpful for students’ comprehension, doing follow-up

listening fluency practice concludes the learning cycle by allowing students to pay full attention to the listening task.

Future research

While EL has been promoted by several scholars, it is still under-researched. The present study has demonstrated only one approach to implementing EL in an EFL classroom for low-intermediate learners. There are many other approaches to developing fluency, such as the 'well-beaten path' approach (repeated listening) and the 'richness' approach (narrow listening: focusing on one specific topic, genre, or writer), suggested by Nation and Newton (op.cit.). To better understand the effects of EL and to explore other effective ways to develop listening fluency, further empirical studies are needed.

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Note

1 Apart from the 100-minute reading and 100-minute listening courses, the three groups had other English courses that focused on oral production, grammar, and vocabulary learning.

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Appendix
Sample of
listening fluency
practice

Remember Miranda, chapter two: 'The first secret'

- 1 What season was it?
- 2 Most days they walked along the beach. True False
- 3 What colour were the leaves on the trees?
- 4 The children _____ and _____ because they liked playing on the beach.
- 5 Who spoke to Cathy?
- 6 What colour were his eyes?
- 7 He asked her to have lunch with him. True False
- 8 When did they meet again?
- 9 She liked Nick. He was _____ and _____.
- 10 Who did Nick ask about?
- 11 Where was Duncan that month?
- 12 Nick told Cathy to be _____ at Beach House.
- 13 Did Cathy tell Mrs Harvey about her dinner with Nick?
- 14 Who did Cathy talk to about Nick?
- 15 'That evening I put the children to _____ and read them a _____'.
- 16 Did she want to see Nick again?
- 17 Did she want to talk to Mrs Harvey?
- 18 She wanted to:
 - (a) finish her _____
 - (b) go _____
 - (c) watch _____
- 19 But ... who did Mrs Harvey talk about?
- 20 She said, 'I don't want you to see Nick _____'.
- 21 'My face felt _____ and my hands felt _____'.
- 22 How did she feel?
- 23 What didn't she want to lose?
- 24 Mrs Harvey was (unhappy/angry).
- 25 Where were Susan and Tim?
- 26 Mrs Harvey walked slowly across the room. True False
- 27 Susan said Tim was afraid so he couldn't _____, but Tim said Susan was afraid because of _____.
- 28 Who shouted?
- 29 I walked slowly up the stairs. True False
- 30 Who kissed Cathy?
- 31 Who said, 'I don't want Grandma to be angry with you'?
- 32 Who told Tim that Nick was a bad man?
- 33 Did Cathy see Nick again soon?