The Effect of Metacognitive Strategy Instruction on the Listening Performance of EFL Students

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Abstract

The aim of this study is to explore the effect of metacognitive strategy instruction on the listening performance of EFL university students. The participants were 82 students studying English translation and literature at Shahid Beheshti University. After screening the participants, 62 of them were selected and assigned to experimental and control groups. The experimental group (n=32) received the strategy training following the models proposed by Vandergrift and Tafaghodtari (2010) and O'Malley and Chamot (1990), while the control group (n=30) received no instruction. The listening section of the TOEFL was utilized to measure the listening performance of the participants before and after the treatment. The results revealed that experimental group significantly outperformed the control group on the post test measure.

Keywords: Listening comprehension, Listening strategies, Metacognition, metacognitive strategies, Metacognitive strategy instruction

1. Introduction

Long ago, listening comprehension used to be considered as a passive activity and did not merit researchers' attention (Jung, 2003; Thompson & Rubin, 1996; Vandergrift, 2004). It had been assumed that a learner's ability to comprehend spoken language would develop entirely on its own through repetition and imitation. The focus of earlier listening comprehension materials was primarily on testing students' ability to listen to oral discourse and then answer comprehension questions based upon the incoming information (Carrier, 2003; Field, 1998). However, in the past few years the interest in teaching the listening skill has grown. Nowadays it is not regarded as a neglected skill anymore. Many people, including learners, need the listening skill in diverse settings such as school, travel, and work.

2. Metacognition

Today, the conceptualization of metacognition in educational sciences and language teaching is often attributed to John Flavell, (Flavell, 1979). According to Flavell (1979), metacognition comprises both metacognitive knowledge and metacognitive experiences or regulation. Metacognitive knowledge refers to acquired knowledge about cognitive processes, knowledge that can be used to control cognitive processes. In Flavell's words "metacognitive knowledge consists primarily of knowledge or beliefs about what factors or variables act and interact in what ways to affect the course and outcome of cognitive enterprises" (1979, p. 907). "Metacognitive experiences are any conscious cognitive or affective experiences that accompany and pertain to any intellectual enterprise. An example would be the sudden feeling that you do not understand something another person just said" (Flavell 1979, p.908). Anderson (2002) divides the metacognitive learning process into five components: (1) preparing and planning for learning, (2) selecting and using learning strategies, (3) monitoring strategy use, (4) orchestrating various strategies, and (5) evaluating strategy use and learning.

Many scholars have recognized the crucial role of metacognition both in cognitive psychology and second or foreign language learning (Bolitho et al. 2003; Chamot et al. 1999; Fernandez-Duque, Baird, and Posner 2000a, 2000b; Mokhtari and Reichard 2002; Paris and Winograd 1990; Pintrich 1999; Schoonen et al. 1998, 2002; Zimmerman and Schunk 2001). According to Hacker, Dunlosky & Graesser:

Metacognitive awareness consists of three parts: thinking of what one knows (metacognitive knowledge), thinking of what one is currently doing (metacognitive skill) and thinking of what one's current cognitive or affective state is (metacognitive experience). What is important is that all this knowledge, the beliefs and perceptions are related to learner autonomy, in that they are needed to make informed decisions about one's learning. If it is the aim of education to let learners take charge of their own learning, then they need to be able to plan, monitor and evaluate their learning. And in order to do so, they need to be metacognitively aware. (Quoted in Reinders 2000)

Harris (2003) believes that "metacognition is concerned with guiding the learning process itself and so includes strategies for planning, monitoring and evaluating both language use

and language learning; key elements in developing autonomy." (p.4). "Strong metacognitive skills empower second language learners" (Anderson, 2002, p. 2)

3. Models of Listening Strategy Instruction

There are various issues related to strategy instruction in the literature. O'Malley and Chamot (1990) discussed about these issues in their seminal book ' *learning strategies in second language acquisition'*. A controversy which exists in instruction in learning strategies is whether instruction should focus on learning strategy instruction or should be integrated with classroom instruction. Some scholars believe that students can generalize the strategies to other contexts and they learn better when they put all their effort on developing strategic skills rather than trying to learn the content at the same time, so the best way to teach learning strategies is to design a separate program or course to implement strategy instruction. Another group of researchers are in favor of integrated strategy instruction. They argue that when students practice strategies by performing academic and language tasks, transference of those skills and strategies to similar tasks and similar contexts will be more easily and successfully done. There is a third group which is in favor of integrating both approaches which were discussed above (Dansereau, 1985; cited in O'Malley & Chamot ,1990, p.153; Derry, 1984 cited in O'Malley & Chamot ,1990, p.153   ).

Another dichotomy which is discussed by O'Malley and Chamot (1990) is direct versus embedded instruction. They state that "in direct instruction, students are informed of the value and purpose of strategy training, whereas in embedded instruction, students are presented with   activities and materials   structured to elicit the use of the strategies being taught but are not informed of the reasons why this approach to learning is being practice" (p.153). An advantage mentioned for embedded strategy training is that little teacher training is required. The results of studies has shown that students which are trained using embedded approach cannot transfer the skills and strategies to new tasks (Brown, Armbruster, & Baker, 1986 cited in O'Malley & Chamot, 1990, p.153).When the purpose and importance of the strategies are explained to the students , a metacognitive component , students are able to maintain and use strategies for longer period of time and transfer it to the new tasks (Brown et al. 1986; Palincsar and Brown, 1986 cited in O'Malley & Chamot,1990, p.153). Many researchers recommend direct strategy training over embedded one.

An instructional model for strategy training which is discussed by O'Malley and Chamot (1990) is 'the strategy teaching model' developed by Jones et al. (1987).

In this model the specific sequence which is suggested for instruction is: assessing students' current strategy use, explaining the new strategy, modeling the strategy and providing scaffolding when students practice using strategies for the first time. O'Malley and Chamot (1990) elaborate on three phases that teachers go through for instruction.   In the preparation phase the teacher activates students' prior knowledge of the lesson topic through questioning, evaluating the relevance of the prior knowledge, and refining that knowledge. During this phase students can also preview the new information to be learned, develop new vocabulary, and identify concepts or beliefs that may be changed or replaced after instruction. In the presentation phase of the lesson, students interact with the new information presented by the

teacher or text through selecting, comparing, organizing, and integrating activities. Reciprocal teaching, in which students and teacher cooperate to understand a text by taking turns to apply a sequence of comprehension strategies. The application and integration phase of the strategic lesson serves the dual purposes of evaluating and consolidating the learning task. To evaluate their learning, students refer back to their original goals that were established during the preparation phase. In doing so they consolidate the new information by using it to restructure their prior knowledge, identified in the preparation phase. (p.189)

Another well-known model which is proposed for strategy training is 'cognitive academic language learning approach' (Chamot and O'Malley, 1987). This model is based on the cognitive theory in which language is viewed as a complex skill. Learners should pass through certain stages to move from declarative to procedural knowledge. Learning in this view is seen as movement from controlled to automatic processing via practice. Anderson's (1983, 1985) ACT (active control of thought) model is a processing model from cognitive psychology which suggests that acquiring a language (movement from declarative to procedural knowledge) takes place in three stages: the cognitive, the associative, and the autonomous stages. (Cited in O'malley and Chamot, 1990, p.162). O'Malley and Chamot (1990) argue that this approach "provides useful insights into the academic language needs of LEP students, which CALLA (cognitive academic language learning approach) is intended to meet" (p.192). The CALLA includes three components: topics from the major content subjects, development of academic language skills, and direct instruction in learning strategies for both content and language. Our focus is on the third component, strategy instruction.

General guidelines for learning strategy instruction in CALLA model are as follows: at first, teachers find out what strategies the students are already using. It can be done through interviews or think-aloud procedure. Next, the teacher can select some new strategies which are not utilized by the students. In the presentation phase, teachers explain the purpose of the learning strategies, name the strategies to be taught, and explain about the advantages of using them. The explanation of the strategies should be tailored to the proficiency level of students. Then teachers model the strategy use by performing a task. Teachers should provide the students with a variety of activities and tasks to practice the strategy use. The next stage is to enable students to learn how to evaluate their own strategy use. This can be done through writing the strategies after completing a task, discussing about the strategies used for tasks, keeping dialogue journals and etc. Finally, teachers help students to transfer the strategies to new contexts.

Another model of strategy instruction is proposed by Vandergrift (2004) and Vandergrift and Tafaghodtari (2010). This model has been utilized in this study for metacognitive strategies training. Vandergrift and Tafaghodtari (2010) explain about stages of strategy instruction in this model:

*Prelistening***: *Planning/predicting stage*

1. After students have been informed of the topic and text type, they predict the types of information and possible words they may hear.

First listen: First verification stage

2. Students verify their initial hypotheses, correct as required, and note additional information understood.

3. Students compare what they have understood/written with peers, modify as required, establish what still needs resolution, and decide on the important details that still require special attention.

Second listen: Second verification stage

4. Students verify points of earlier disagreement, make corrections, and write down additional details understood.

5. Class discussion in which all class members contribute to the reconstruction of the text s main points and most pertinent details, interspersed with reflections on how students arrived at the meaning of certain words or parts of the text.

Third listen: Final verification stage

6. Students listen specifically for the information revealed in the class discussion which they were not able to decipher earlier.

Reflection stage

7. Based on the earlier discussion of strategies used to compensate for what was not understood, students write goals for the next listening activity.

(Vandergrift and Tafaghodtari, 2010)

4. Empirical studies on Listening strategy instruction

Until recently, in most of the listening strategy studies, the focus of attention have been on exploring the types of strategies used by learners or the pattern of strategy in in successful versus less successful learners. However, the focus has shifted to research into ways to teach effective strategy use. There is not a consensus on whether listening strategies should be actively taught or not. Even those researchers that are in favor of strategy instruction do not have the same opinion about the context of instruction. Some believe that strategy instruction should be integrated with the main curriculum, while others are in favor of separate instruction. Chamot (2004) proposed that "teachers should opt for explicit instruction and should probably integrate the instruction into their regular course work, rather than providing a separate learning strategies course" (p.19).

Despite these disagreements in the field of listening strategy instruction, research shows that L2 learners do benefit from being actively taught do use various strategies as they approach listening tasks. Mendelsohn (1995) states that it is the responsibility of the listening instructor to teach students to use strategies rather than simply provide opportunities for students to listen to oral passages.

Rubin (1988 cited in Vandergrift, 1999) investigated the effect of strategy instruction on the comprehension of video by Spanish high school students. The performance of three experimental groups was compared with the two control groups. Rubin found that the use of some strategies (e.g. storyline) can help students in successful comprehension of difficult materials. He concluded that "the combination of well selected video and the acquisition of effective learning strategies can improve student affect and motivation" (p. 32).

In a longitudinal study, using video segments from simulated authentic materials, Thompson and Rubin (1996) investigated the effect of strategy instruction on the listening comprehension performance of university students learning Russian. The performance of an experimental group was compared to a control group which received no strategy instruction. The result of the pre and post test showed that students who received strategy instruction improved significantly over those who did not receive such instruction. It was demonstrated that metacognitive strategies helped students to manage their approach to listening.

Nakata (1999) studied the influence of listening strategy training on Japanese EFL learners' listening competence. Results showed that the effect of listening strategy training was more discernible on perception than on comprehension, especially for those students who received low scores on the G-TELP.

Carrier (2003) taught listening comprehension strategies, focusing on academic listening tasks. The participants were a small group of high school ESL students. This study took six weeks and included both bottom-up and top-down approaches to listening. The strategies which were taught involved selective attention and note taking. First the teacher defined and modeled the strategies then provided the students with opportunity to practice. The result of pre-test and post-test revealed that students significantly improved both bottom-up and top-down approaches.

Vandergrift (2003) made use of tasks designed to develop effective listening strategies to raise awareness of FSL university students about listening process. The instruction was as follows: after being informed of the topic of the lesson, students wrote their prediction and related vocabulary about the information they might hear. Then they listened to the aural text for the first time and saw whether their predictions were right. Next they discussed about what they had understood. The students listened to the text for the second time and wrote additional information. This was followed by class discussion in which students shared the strategies they had used to comprehend the text. After a third listening, students wrote a personal reflection on what they had learned about their own listening processes and what strategies they might use in future to improve listening comprehension. Students' written reflections revealed positive reactions to the strategies, increased motivation, and understanding of their own thinking processes during listening tasks.

Goh and Taib (2006) utilized eight specially designed listening lessons that included traditional listening exercises, individual post-listening reflections on their listening experience, and teacher-facilitated discussions that focused on specific aspects of metacognitive knowledge about listening to teach metacognitive strategies to ten primary school pupils. After the eight lessons, the students reported a deeper understanding of the

nature and the demands of listening, increased confidence in completing listening tasks, and better strategic knowledge for dealing with comprehension difficulties. The weaker learners have benefited the most from this process-based approach to listening instruction.

Graham and Macaro (2008) investigated the effects of strategy instruction on the listening performance and self-efficacy of 68 lower-intermediate learners of French in England. The effects of high- and low-scaffolded interventions were also compared. Result represented that the program improved listening proficiency and learners' confidence about listening.

Vandergrift and Tafaghodtari (2010) investigated the effects of a metacognitive, process-based approach to teaching second language (L2) listening. The participants were 106 students of French as an l2. 59 students were assigned to experimental group. They listened to a variety of texts and were taught metacognitive processes including prediction, planning, monitoring, evaluating and problem solving. The control group included 47 students who listened to the same texts without metacognitive instruction. The experimental group outperformed the control group in the listening comprehension measure. Less skilled listeners in the experimental group made greater gains than their more skilled ones.

In addition, there are a few other studies which have investigated listening strategy employed by different second language learners, such as Japanese EFL (Rost & Ross, 1991), Italian (Laviosa, 1991), Chinese EFL (Huang & Naerssen, 1987), and Taiwanese EFL learners (Chao, 1999; Chien & Li, 1997; Ku, 1998; Lee, 1997; Lin, 2000; Teng, 1998).

5. The present study

A common method used in teaching listening, especially in Iran, is to ask students to listen to a text and tell what they have heard or answer a number of comprehension questions. It has been observed that these methods are not so fruitful. Listening strategy instruction is a new field which has recently attracted the researchers' attention. Few, if any, studies have been conducted to investigate the effect of metacognitive strategy instruction on listening performance of Iranian intermediate EFL learners. In order to bridge this gap and present a new, practical and valid teaching method, the present study was an attempt to recognize the role of strategy training in improving listening comprehension skill and investigate the following question:

Does metacoignitive strategy instruction have any effect on the listening performance of the EFL students?

6. Methodology

6.1 Participants

The participants for this study were 82 students of English translation and literature studying at Shahid Beheshti University. They were both male and female freshman whose age varied from 18 to 23. After screening the participants through the pre-test, 62 of them were selected and assigned to experimental (n=32) and control (n=30) groups.

6.2 Instruments

The first instrument used in this study was the listening section of the TOEFL. It was used to measure the listening performance of both control and experimental groups. It consists of three sections and 50 questions. In part A the participants hear short conversations between two people. After each conversation, a third person will ask a question about what was stated or implied in the conversation. In part B and C, they hear conversations and talks of up to two minutes in length. The factual information in the conversations and talks is general in nature. After each conversation and talk, another person will ask several questions about it. The questions are about information that was stated or implied in the conversation or talk.

The second instrument was a series of oral texts which were about a variety of topics and had various lengths. Because it was the first time that the participants undertook strategy instruction, at first simpler and shorter texts were practiced. The texts had good audio quality and were presented in a way which was clear to them.

6.3 Procedure

The first session, the researcher met the participants, talked with them about the study for a few minutes and made them aware of the processes they were supposed to go through. To ensure the homogeneity of the subjects, 62 students were selected based on first administration of listening section of the TOEFL. 32 students were assigned to experimental and 30 to control groups. The experimental group undertook the treatment; however the control group did not receive any instruction.

6.3.1 Experimental Group Treatment

The treatment was based on the model proposed by Vandergrift and Tafaghodtari (2010) and the model discussed by O'Malley and Chamot (1990). The participants in the experimental group participated in a 6-session strategy training. Each session was held once a week and took 45 minutes**.** Each week the participants listened to a different oral text. The steps taken during the strategy instruction period are as follows:

1) The concept of language learning strategies was explained. Different types of strategies including cognitive, metacognitive and socioaffective were briefly explained. Some specific examples were given.
2) This stage involved focusing specifically on listening strategies. To familiarize students with them, the note taking strategies were explained as an example. Because the focus of attention was on metacognitive strategies, the metacognitive listening strategies were described. Some handouts (see Appendix A) were given to the students which included the definition of the strategies. The handouts were based on an article by Vandergrift (1997).The metacognitive strategies which were elaborated were planning, monitoring and evaluation.
3) Students were informed of the topic of the oral text and wrote it on a piece of paper.
4) They were asked to brainstorm the kind of information they might hear and wrote it on the paper based on their background knowledge. They also wrote the related vocabularies which they predicted they might hear. This prediction phase was done in pairs or in small

groups. The participants were reminded that they should consider all logical possibilities. The metacognitive processes involved in this phase were planning and directed attention.

5) After completing their predictions, the participants listened to the text for the first time. They were asked to put a check mark beside the information they had predicted if they heard any of them. They wrote any other new information they heard and comprehended, too. The metacognitive processes involved in this phase were selective attention, monitoring, and evaluation.

6) At this point, the participants worked in pairs to compare their predictions and the information they comprehended. They were encouraged to discuss points of confusion and disagreement, modify as required and decide the parts of the text and information that would require careful attention during the second listening. The metacognitive processes involved in this phase were monitoring, evaluation, planning and selective attention.

7) The participants listened to the text a second time. They attempted to make sense of the point of difficulty raised after the first listening, make correction and they also wrote the new information they understood on the paper. The metacognitive processes involved in this phase were selective attention, monitoring, evaluation and problem solving.

8) Then they were engaged in a class discussion to confirm the understanding of the text and how they succeeded in the process of comprehending. The metacognitive processes involved in this phase were monitoring, evaluation and problem solving.

9) Students listened to the text for a third time focusing specifically on the information revealed in the class discussion which they were not able to make sense of before. The metacognitive processes involved in this phase were selective attention, monitoring and problem solving.

10) Finally, each student completed a personal reflection on the listening process, noting any strategies they would use in the following listening.

After the treatment stage was completed, another listening comprehension test with the same level of difficulty   was administrated to both experimental and control groups to see whether the strategy instruction had had any effect on the participants' performance or not.

7. Results

The research question concerned the degree to which metacognitive instruction might result in variance in L2 listening performance. It was hypothesized that   the group receiving the experimental treatment would outperformed control group on the posttest of listening comprehension.

To see if the control and experimental groups were in equal conditions before the treatment began, it was decided to compare the mean scores of both groups. A pre-requisite to any comparison of two independent means is equality of variances. Equality of variances was investigated using Leven's test. The p-value turned out to be 0.490, which is bigger than 0.05, so the variances were assumed as equal with 95% confidence. To investigate equality of means for two independent populations, an independent samples *t*-test was the best statistical test, so the means were compared using a two tailed *t*-test. The p-value was 0.357, which is bigger than 0.05; therefore, it was concluded that there was no significant difference between

the mean scores of two groups. The following table presents a summary of statistical analysis utilized to investigate the equality of means.

Table 1. Descriptive statistics and independent *t*-test for the comparison of pre-test results

Pre-test result	N	Mean	SD	df	t	sig
Experimental group	32	25.59	4.62			
Control group	30	24.43	5.20	60	0.929	0.357

Thus, it can be concluded that the two groups were homogenous in terms of their language proficiency.

After it was confirmed that the two groups were at the same level of language proficiency before the treatment, it was time to see whether any change had occurred in the performance of the experimental group after the treatment. To this end, the mean scores of the listening test administered after the treatment were compared. Table 4.2 presents the results of the statistical analysis performed to see whether there is any significant difference between mean scores of experimental and control groups. By conducting a Leven's test, it was found that the

variances of both groups are equal. The p-value was calculated to be 0.712, which was bigger that 0.05; consequently, the hypothesis concerning the equality of variances was not rejected. The mean scores were compared with an independent *t*-test. The p-value turned out to be 0.001, which is smaller than 0.05; therefore, the hypothesis concerning the equality of means was rejected and there was a significant difference between the performance of experimental and control groups.

Table 2. Descriptive statistics and independent *t*-test for the comparison of post-test results

Control group	N	Mean	SD	df	t	sig
Post-test	30	24.56	5.76			
Pre-test	30	24.43	5.20	29	0.357	0.724

In order to find out about the experimental group progress after the treatment, it was decided that the participants' initial scores would be compared to the final ones. A paired *t*-test was performed to compare the mean scores of students before and after the treatment. As shown in Table 4.3, the p-value was calculated to be 0.000, which is smaller than 0.05, indicating

that there was a significant difference between the means of the experimental group before and after the treatment.

Table 3. Descriptive statistics and matched *t*-test for the experimental group progress

Experimental group	N	Mean	SD	df	t	sig
Post-test	32	29.37	5.46			
Pre-test	32	25.59	4.62	31	7.28	0.000

To see if there had been any statistically significant difference between pre-test and post-test mean scores of the control group, a matched *t*-test was used. As illustrated in Table 4.4, the p-value turned out to be 0.724, which is bigger than 0.05, suggesting that there was no significant difference between the mean scores of pre-test and post-test.

Table 4. Descriptive statistics and matched *t*-test for the control group progress

Post-test result	N	Mean	SD	df	t	sig
Experimental group	32	29.37	5.46			
Control group	30	24.56	5.76	60	3.63	0.001

8. Conclusion

The result of statistical analysis indicates that the experimental group outperformed the control group after the treatment sessions. This finding is consistent with those of Vandergrift and Tafaghodtari (2010), Graham and Macaro (2008) Goh and Taib (2006), and Vandergrift (2002; 2003a). Once students are made aware of successful strategies and more importantly discover the learning strategies that suit them best, they will be better motivated and thus able to become more effective learners. When students learn how to plan for a listening task, how to monitor their comprehension and how to evaluate their performance, they take on more responsibility for their learning, which is a pre-requisite for self-regulated learning. Self-regulated learners actively participate in the process of task completion and have a clear plan for dealing with different problems and can monitor their plan, which leads to greater success. Metacognitive strategy instruction raises the awareness of students about planning, monitoring and evaluating, thus aiding to develop self regulated learning, which results in improved performance. The result of this study suggests that strategy training on the whole contributes to improving the students' language skills, in this case listening. When the students are trained how to learn, they will become effective learners and know how to cope with the learning task. In completing a listening task, self regulated learners can evaluate the

challenges of the task, be informed about their own level of proficiency, and accordingly use the appropriate strategies to successfully accomplish the task. Vandergrift (2002) states that "teaching for metacognition provides language learners with the knowledge and tools for meaningful transfer of learning so that they know how to listen to and understand authentic texts outside of the classroom" (p.573).

The results of this study reveal that strategy instruction has a positive effect on the listening performance of the students. It raises the metacognitive knowledge of students and results in improved performance. When students are made aware of metacognitive strategies, they take on more responsibility for their learning that is necessary for self-regulated learning.

The result of the present study provides some directions for teachers to promote students' metacognitive listening strategies of planning, monitoring and evaluation. Teachers may need to introduce the concept of language learning strategies to students and make students familiar with the learning strategies. One of the basic problems of most Iranian EFL learners is the listening skill, so teachers may need to provide instruction and practice in using metacognitive strategies, especially in planning, comprehension monitoring, and evaluation strategies, which have positive influence on their performance. Foreign language teachers should be engaged in an ongoing process of determining the kinds of strategies which have potential for improving students' listening ability and motivation. As Oxford et al. (1989) has suggested, it is important to teach learners clearly why and how to use strategies in appropriate situations. It is necessary for teachers to provide learners with opportunities to practice the new strategies so as to integrate them into the process of language learning.

In the Iranian context, very few textbooks elaborate on listening tasks related to metacognitive strategies related to EFL listeners. More research evidence has confirmed the positive influence of strategy instruction on developing listening; therefore, incorporating strategy-based tasks and activities in listening textbooks becomes an urgent need. Materials developers should allocate specific sections of listening materials to introduce the concept of strategies, particularly metacognitive strategies.

Learners themselves can apply the metacognitive strategies while working on different listening tasks and activities. Using listening strategies increases their awareness about the listening process, which leads to better performance. By practicing metacognitive listening strategies, learners become self-regulated listeners and can succeed in accomplishing different tasks with different levels outside the classroom contexts.

References

Anderson, N. J. (2002). The role of metacognition in second language teaching and learning. Washington, DC: Center for Applied Linguistics. ERIC Clearinghouse on Languages and Linguistics.

Bolitho, R., R. Carter, R. Hughes, R. Ivanic, H. Masuhara, & B. Tomlison. 2003. 'Ten questions about language awareness'. *ELT Journal, 57,* 251–60. http://dx.doi.org/10.1093/elt/57.3.251

Carrier, K. A. (2003). Improving high school English language learners' second languagelistening through strategy instruction. *Bilingual Research Journal, 27*, 383-410. http://dx.doi.org/10.1080/15235882.2003.10162600

Chamot, A. U. (2004). Issues in language learning strategy research and teaching.

Chamot, A. U., S. Barnhardt, P. B. El-Dinary, & J. Robbins. (1999). The Learning Strategies Handbook. White Plains, NY: Addison, Wesley, Longman.

Chao, Y. G., (1999). EFL listening strategies by majors in Taiwan. Proceedings of the sixteenth conference on English teaching and learning in the Republic of China (pp. 265-479). Taipei: Crane. *Electronic Journal of Foreign Language Teaching, 1*, 14-26.

Chien, C. N., & Li, Wei. (1997). Developing a model of listening strategies and processes for EFL learners. *International Journal of Psycholinguistics, 13*, 255-272.

Fernandez-Duque, D., J. Baird, & M. Posner. (2000a). 'Executive attention and metacognitive regulation'. *Consciousness and Cognition, 9*, 288–307. http://dx.doi.org/10.1006/ccog.2000.0447s

Fernandez-Duque, D., J. Baird, & M. Posner. (2000b). 'Awareness and metacognition,' *Consciousness and Cognition, 9*, 324–6. http://dx.doi.org/10.1006/ccog.2000.0449

Field, J. (1998). Skills and strategies: Towards a new methodology for listening. *ELT Journal, 52,* 110-118. http://dx.doi.org/10.1093/elt/52.2.110

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist, 34,* 906–911. http://dx.doi.org/10.1037/0003-066X.34.10.906

Goh, C. & Y. Taib. (2006). Metacognitive instruction in listening for young learners. *ELT Journal, 60*, 222–232. http://dx.doi.org/10.1093/elt/ccl002

Graham, S., & Macaro, E. (2008). Strategy instruction in listening for lower-intermediate learners of French. *Language Learning, 58,* 747–783. http://dx.doi.org/10.1111/j.1467-9922.2008.00478.x

Harris, V. (2003). Adapting classroom-based strategy instruction to a distance learning context. *TESL Internet Journal, 7*(20).

Huang, X., & Naerssen, M. V. (1987). Learning strategies for oral communication. *Applied Linguistics, 8,* 287-307. http://dx.doi.org/10.1093/applin/8.3.287

Jung, E. H. (2003). The role of discourse signaling cues in second language listening comprehension. *The Modern Language Journal, 87,* 562-577. http://dx.doi.org/10.1111/1540-4781.00208

Ku, P. Y. (1998). Strategies associated with listening comprehension of EFL students in Taiwan. The proceeding of the seventh international symposium on English teaching (pp. 581-591). Taipei: Crane.

Laviosa, F. (1991). An investigation of the listening strategies of advanced learners of Italian as a second language. Paper, Bridging Theory and Practice in the Foreign Language Classroom. MD: Loyola College.

Lee, H. (1997). A study of the listening comprehension strategies of junior college EFL students in Taiwan. Papers from the Fourteenth Conference on English Teaching and Learning in R.O.C., 393-412.

Lin, S. H. (2000). A study of English listening comprehension strategies used by senior high school students in Taiwan. Unpublished Master Thesis, National Kaohsiung Normal University, Kaohsiung, R.O.C. Number: AAT 9916234.

Mendelsohn, D. (1995). Applying learning strategies in the second/foreign language listening comprehension lesson. In Mendelsohn, & Rubin, A guide for the teaching of second language listening. San Diego, CA: Dominie Press.

Mokhtari, K., & C. Reichard. (2002). 'Assessing students' metacognitive awareness of reading strategies'. *Journal of Educational Psychology, 94,* 249–59. http://dx.doi.org/10.1037/0022-0663.94.2.249

Nakata, Y. (1999). The effects of listening strategy training on listening competence. Paper, AILA, Tokyo.

O'Malley, J. M., & Chamot, A. U. (1990). Learning strategies in second language acquisition. Cambridge, UK: Cambridge University Press.

Paris, G. S., & P. Winograd. (1990). 'How metacognition can promote academic learning and instruction' in B. F. Jones and L. Idol (eds): Dimensions of Thinking and Cognitive Instruction. Hillsdale, NJ: Lawrence Erlbaum, pp. 15–51.

Pintrich, P. R. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory Into Practice, 41,* 219-225. http://dx.doi.org/10.1207/s15430421tip4104_3

Pintrich, P. R. (1999). 'The role of motivation in promoting and sustaining self-regulated learning'. *International Journal of Educational Research, 31,* 459–70. http://dx.doi.org/10.1016/S0883-0355(99)00015-4

Reinders, H. (2005). Do it yourself? A Learners' Perspective on Learner Autonomy and Self-Access Language Learning in an English Proficiency Programme. [Online] Available: http:// www.hayo.nl/thesisrequest.html. (July 22, 2007)

Rost, M. & Ross, M. (1991). Learner use of strategies in interaction: typology and teachability. *Language Learning, 41,* 235-273. http://dx.doi.org/10.1111/j.1467-1770.1991.tb00685.x

Schoonen, R., J. Hulstijn & B. Bossers. (1998). 'Metacognitive and language-specific knowledge: An empirical study among Dutch students in Grades 6, 8, 10,' *Language Learning, 48*, 71–106. http://dx.doi.org/10.1111/1467-9922.00033

Schoonen, R.,A. van Gelderen,K. de Glopper, J. Hulstijn, A. Simmis, P. Snellings, & M.

Stevenson. (2003). 'First languageand second language writing: The role of linguistic knowledge speed of processing and metacognitive knowledge'. *Language Learning, 53,* 165–202. http://dx.doi.org/10.1111/1467-9922.00213

Teng, H. (1998). An investigation of EFL listening comprehension strategies. Paper, TESOL,Seattle.

Thompson, I., & Rubin, J (1996). Can strategy instruction improve listeningcomprehension? *Foreign Language Annals, 29,* 331–342. http://dx.doi.org/10.1111/j.1944-9720.1996.tb01246.x

Vandergrift, L. (2003). Orchestrating strategy use: Towards a model of the skilled L2 listener. *Language Learning, 53,* 461–494. http://dx.doi.org/10.1111/1467-9922.00232

Vandergrift, L. (2004). Listening to learn or learning to listen? *Annual Review of Applied linguistics, 24*, 3-25. http://dx.doi.org/10.1017/S0267190504000017

Vandergrift, L., & Tafaghodtari, M. (2010). Teaching L2 Learners How to Listen Does Make a Difference: An Empirical Study. *Language Learning, 60,* 470-467. http://dx.doi.org/10.1111/j.1467-9922.2009.00559.x

Zimmerman, B. and D. Schunk. (2001). Self-Regulated Learning and Academic Achievement. Mahwah, NJ: Erlbaum.

Appendix a

Vandergrift's (1997) taxonomy of Listening strategies

Metacognitive Strategies

1. **Planning:** Developing an awareness of what needs to be done to accomplish a listening

   task, developing an appropriate action plan and/or appropriate contingency plans to

   overcome difficulties that may interfere with successful completion of the task.

   2. **Monitoring:** Checking, verifying, or correcting one's comprehension or performance in

   the Course of a listening task.

2a. Comprehension monitoring	Checking, verifying, or correcting one's understanding at the local level.	I translate and see if it sounds right (in combination with translation). I just try to put everything together, understanding one thing leads to understanding another.
1a. Advance organization	Clarifying the objectives of an anticipated listening task and/or proposing strategies for handling it.	I read over what we have to do. I try to think of questions the teacher is going to ask.
1b. Directed attention	Deciding in advance to attend in general to the listening task and to ignore irrelevant distractors; maintaining attention while listening.	I listen really hard. I pick out the words that are familiar so that ... (in combination with inferencing)
1c. selective attention	Deciding to attend to specific aspects of language input or situational details that assist in understanding and/or task completion.	I listen for the key words. I establish the speakers in the conversation, their relationship by tone of voice, how they will address each other. This will limit the topics of discussion (in combination with planning, voice inferencing, and elaboration).
Id. Self- management:	Understanding the conditions that help one successfully accomplish listening tasks and arranging for the Presence of those conditions.	I try to get in the frame of mind to understand French. I put everything aside and concentrate on what she is saying.

2b. Auditory monitoring	Using one's "ear" for the language (how something sounds) to make decisions.	**I use my knowledge of Portuguese, primarily sound (in combination with transfer).** **I use the sound of words to relate to other words I know.**
2c. Doublexheck monitoring	**Checking, verifying, or correcting one's understanding across the task or during the second time through the oral text.**	**I might catch it at the end and then I'd go back.** **Sunny in the morning, that's not making sense ... (earlier) it sounded like a cold front, something doesn't make sense to me any more.**

3. Evaluation: Checking the outcomes of one's listening comprehension against an internal measure of completeness and accuracy

3a. Performance evaluation:	**Judging one's overall execution of the task.**	**How close was I? (at end of a think-aloud report).**
3b. Strategy evaluation:	Judging one's strategy use.	**I don't concentrate too much to the point of translation of individual words because then you just have a whole lot of words and not how they're strung together into some kind of meaning.**
4. Problem identification	**Explicitly identifying the central point needing resolution in a task or identifying an aspect of the task that hinders its**	**I'm not sure but "partager" and I'm not really sure what that means.**

	successful completion.	**I think that kind of has something to do with that.** **Music, there is something, ..." des jeux",** **I don't know what that is.**

Comitive Stratesties

1. Inferencing: Using information within the text or conversational context to guess the meanings of unfamiliar language items associated with a listening task, to predict outcomes , or to fill in missing information.

la. Linguistic inferencing:	**Using known words in an utterance to guess the meaning of unknown words.**	**I use other words in the sentence. [try to think of it in context and guess**
lb. Voice and paralinguistic inferencing	Using tone of voice andlor paralinguistics to guess the meaning of unknown words in an utterance.	**l listen to the way the words are said.** **I guess, using tone of voice `as a clue.`**
lc. Kinesic inferencing	Using facial expressions, body language, and hand movements to guess the meaning of unknown words used by a speaker.	**I try to read her body language.** **I read her face.** **l use the teacher's hand gestures.**
Id. Extralinguistic inferencing	Using background sounds and relationships between speakers in an oral text, material in the response sheet, or concrete situational referents to guess the meaning of unknown words.	**I guess on the basis of the kind of information the question asks for.** **I comprehend what the teach chooses to write on the board to clarify what she is saying**

le. Between parts inferencing:	Using information beyond the local sentential level to guess at meaning.	Because in the beginning she said "course," so maybe it was, maybe it was a race ... may be a horse race ... You pick out things you do know and in the whole situation piece it together so that you do know what it does mean.
2a. Personal elaboration:	Referring to prior experience personally.	I think there is some big picnic or a family gathering, sounds like fun, I don't know ... You know ... maybe they missed each other, because that happens to me lots we just miss accidentally and then you call up and say, "Well, what happened?"
2b. World elaboration	Using knowledge gained from experience in the world.	Recognizing the names in sportshelps you to know what sport they are talking about. I use the topic to determine the words that I will listen for (in combination with selective attention).
2c. Academic elaboration	Using knowledge gained in academic situations.	[I know that] from doing telephone conversations in class. I relate the word to a topic we've studied. I try to think of all my background in French.

2e. Creative elaboration	Making up a story line, or adopting a clever perspective	**Sounded like introducing something, like it says here is something but I can't figure out what it is, it could** **be like … one of the athletes, like introducing some person or something.** **I guess there is a trip to the Carnival in Quebec so maybe it is like something for them to enter a date, to write. or draw …**
2f. Imagery	Using mental or actual pictures or visuals to represent information; coded as a separate category but viewed as a form of elaboration.	**I can picture the words in my mind.** **I make pictures in my mind for words I know, then I fill in the picture that's missing in the sequence of pictures in my mind**
3. Summarization	Making a mental or written summary of language and information presented in a listening task.	**I remember the key points and run them through my head, "what happened here and what happened here" and get everything organized in order to answer the questions**
4. Translation:	Rendering ideas from one language to another in a relatively verbatim manner.	**I translate.** **1'11 say what she says in my head, but in English.** **A little voice inside me is translatinq**
5. Transfer	Using knowledge of one language (e.g., cognates) to facilitate listening in another.	**I try to relate the words to English.** **I use my knowledge of**

		other languages: English to understand German and Portuguese (primarily sound) to understand French.
6. Repetition	Repeating a chunk of language (a word or phrase) in the course of performing a listening task.	**I sound out the words.** **I say the word to myself.**
7. Resourcing	Using available reference sources of information about the target language, including dictionaries, textbooks, and prior work.	**I look it up in a dictionary.** **I look in the back of the book.**
8. Grouping:	Recalling information based ongrouping according to common attributes.	**1 try to relate the words that sound the same. (in combination with auditory monitoring). I break up words for parts I might recognize.**
9. Note-taking	Writing down key words and concepts in abbreviated verbal, graphic, or numerical form to assist performance of a listening task.	**I write down the word.** **When I write it down, it comes to my mind what it means.**
10. Deduction/ **induction:**	Consciously applying learned or selfdeveloped rules to understand the target language.	**I use knowledge of the kinds of words such as parts of speech.**
11. Substitution	**Selecting alternative approaches, revised plans, or different words or phrases to accomplish a listening task.**	**I substitute words, translate and see if it sounds right (in combination with translation and**

		comprehension monitoring).

Socioaffective Strategies

1. Questioning for clarification	**Asking for explanation, verification, rephrasing, or examples about the language and/or task; posing questions to the self**	**1'11 ask the teacher.** **1'11 ask for a repeat.**
2. Cooperation:	Working together with someone other than an interlocutor to solve a problem, pool information, check a learning task, model a language activity, or get feedback on oral or written Performance.	**I ask someone who knows the word.** **I ask a friend.** **I ask the person next to me.**
3. Lowering anxiety	Reducing anxiety through the use of mental techniques that make one feel more competent to perform a listening task.	**I think of something funny to calm me down.** **I take deep breaths.**
4. Self-encouragement	Providing personal motivation through positive self-talk and/or arranging rewards for oneself during a listening activity or upon its completion.	**I try to get what I can.** **0 . K ... my hunch was right.** **I tell myself that everyone else is probably having some kind of** **problem as well.**
5. Taking emotional	**Becoming aware of, and getting in touch with one's emotions while listening, in order to avert negative ones**	**I take it home and take it out on my family.** **O.K. I'm getting mad**

| temperature: | and make the most of positive ones. | 'cause I don't understand. |