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Effects of Teacher-led Think-aloud Instruction on L2 Listening Comprehension

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### **Abstract**

In this mixed-methods research study, 13 middle school students did activities to enhance their second language listening comprehension. The students were shown a video from “This is Language” and were given questions to answer that pertained to the video. Their ability to comprehend the video was measured based on how they answered the questions. They used two methods while doing the activities; partner work, and the Think-aloud method. After doing the activities, students were interviewed to see what they thought about the two methods and how metacognitive awareness came into play. According to Vandergrift & Tafaghodtari (2010), metacognitive awareness is necessary to successfully use the Think-aloud method. Looking at the listening comprehension questions and the interviews, there seems to be an improvement in listening comprehension when using the Think-aloud method, however the students did not seem to be aware that it helped. Further research on metacognitive awareness might be necessary to better explain these results.

## Introduction

When I learned my first foreign language, I struggled. I saw the Spanish conjugation for *ser*, and I remember thinking “I didn’t have to think about conjugating when I use my native language!” It soon dawned on me that in order to learn a new language, I first had to think about it cognitively. For example, when comprehending text, I had to learn how to look at context clues in Spanish. When listening to someone, I had to learn how to pull out the important words and phrases to understand what they were saying. Once this became second nature, comprehension of this second (L2) language became easier. In other words, I had to learn how to understand a foreign language before I could excel in comprehension.

The comprehension process is essential to understand a foreign language; however, it is not an easy process when done in an L2 setting. Comprehending text and speech requires people to make inferences and explanations to enhance understanding (Gillian, Fargo & Robertson, 2009; Trabasso & Magliano, 1996). This means that people have to look at context clues to come up with conclusions and main ideas of text and speech. While it can be easy to find text to enhance reading comprehension outside of the foreign language classroom, it may not be as easy to find people who speak the language. Listening comprehension is an extremely important part of language learning, and one of the most difficult to enhance if the language learner is not in a location where they can hear people communicate in the language. In order to create a foundation for new language learners, metacognitive strategies have been created for those who do not yet know how to read or listen to a foreign language.

Listening skills are often difficult to develop in a foreign language learning context. This is because foreign language classes are only during a small part of the day, a few times a week.

Many times the class is located in a city or town without speakers of the foreign language. Even if there are speakers of the language, it is difficult to become fluent without complete immersion. As a result, developing second language listening skills requires more than just practice, so using listening comprehension strategies to enhance listening skills opens new doors for pedagogy (Vandergrift & Tafaghodtari, 2010).

The idea of coming up with strategies to improve comprehension is called metacognition (Li, 2013). Metacognition is the idea of learning how to think about certain subjects. For example, when reading a text, students can create their own strategies to better understand how to comprehend what they are reading. This easily can be put into the listening comprehension as well, because students need to come up with strategies to understand speech. One form of metacognition is called Think-aloud. This strategy gives students a chance to articulate their thoughts to become aware of their thought process when comprehending speech (Gillian, Fargo & Robertson, 2009; Trabasso & Magliano, 1996). When using this strategy, students can talk about what problems they are having about comprehending a specific form of audio or text, and then elaborate on how they will solve the problem. While think-aloud can help students cognitively when using a foreign language, students can also expect to gain independence when comprehending the foreign language.

With this research in mind, I questioned the effect that Think-aloud had on L2 listening comprehension with middle schoolers. In this study, I pre-assessed their listening comprehension abilities with a video in Spanish. Over the course of a week, I implemented the think-aloud strategy to enhance their comprehension. At the end of the week, I assessed their progress to calculate the effect of the strategy on the students. My hypothesis was that if the students were

able to use the Think-aloud method properly, then they would enhance their listening comprehension skills.

## **Literature Review**

In this literature review, studies have been collected pertaining to metacognition and listening comprehension to better understand these concepts. These studies are conducted with university students as well as students under high-school age. Sources were found in databases such as Education Full Text and Education Research Complete. These studies were written from 2006-2014, except for four that were written on 1992, 1996, 2003 and 2004. These three studies were important in regards to comprehension and metacognition, and they were cited by many of the more recent studies. Overall, these studies give insight on metacognition (specifically think-aloud strategies) and how it impacts listening comprehension. Collaboration with peers is also analyzed, but is not necessarily related to metacognition.

### **Understanding Comprehension**

Comprehension is defined as encoding facts and using knowledge to come up with explanations and inferences to promote understanding (Gillian, Fargo & Robertson, 2009; Trabasso & Magliano, 1996). Second language learners specifically rely on comprehension to understand text and speech. Trabasso and Magliano (1996) talk about the importance of using explanations and predictions as a way to process thought and look deeper into discourse. For example, understanding text requires reading comprehension, where the language learner explains specific situations, conditions or rationales for why something occurs. Predictions can also result from inferences based on what the reader expects to happen according to the text. Listening plays a very important role in comprehension as well, as it helps language learners articulate what they hear based on prior knowledge of the topic. Instruments that are used are questionnaires, journals, interviews and verbal reports to help create strategies for better

understanding speech (Cross, 2009). In classroom practice, students can watch an interview or a verbal report to work on listening comprehension. They would listen to the audio segment by segment to understand what is being said. Usually assessment is conducted to monitor comprehension for foreign language classes. Even though both reading and listening comprehension are important for language development, listening comprehension has been researched less for second language learning (Bozorgian, 2014).

### **Metacognition**

According to Bozorgian (2014), metacognition is defined as thinking about thinking or cognition. Li (2013) explains that it requires students to understand their own thought process, create their own strategies, and then implement these strategies to improve listening comprehension. Li also says that students think about strategies to improve on listening tasks. When they find that the strategy they chose is not working or is failing, they will try to find remedies that produce better results. When the task is finished, they will evaluate their learning process to improve effectiveness. Vandergrift and Tafaghodtari (2010) explain the process as predicting the process beforehand to come up with the strategy, monitoring their progress, evaluating the results and solving the problem for the future. Overall, these two researchers state that metacognition not only involves cognitive process, but it also produces the means to implement and monitor these processes. The result is that students can learn to think on their own and eventually be able to comprehend speech independently. Since listening is such an integral yet challenging aspect of language acquisition, developing a pedagogical understanding of metacognition can help students learn how to listen (Bozorgian, 2014; Vandergrift & Tafaghodtari, 2010). In 2004, Vandergrift created a process-based approach to apply the metacognitive strategy for listening comprehension (p. 11). The five stages include

planning/predicting, first verification, second verification, final verification, and reflection (Bozorgian, 2014; Vandergrift & Tafaghodtari, 2010).

Listening Instruction Stages and Related Metacognitive Strategies

<i>Stage of Listening Instruction</i>	<i>Related Metacognitive Strategies</i>
Planning/predating stage Once listeners know topic and text type, they predict types of information and possible words they may hear.	Planning and directed attention
First verification stage Listeners verify initial hypotheses, correct as required, and note additional information understood. Listeners compare what they have written with peers, modify as required, and establish what needs resolution and decide on details that still need special attention.	Monitoring Monitoring, planning, selective attention
Second verification stage Listeners verify points of disagreement, make corrections, and write down additional details understood. Class discussion in which all contribute to reconstruction of the text's main points and most pertinent details, interspersed with reflections on how listeners arrived at the meaning of certain words or parts of the text.	Monitoring and problem solving Monitoring and evaluation
Final verification stage Listeners listen for information that they could not decipher earlier in the class discussion.	Selective attention and monitoring
Reflective stage Based on discussion of strategies used to compensate for what was not understood, listeners write goals for next listening activities.	Evaluation

*Source: Vandergrift, 2004.*

In stage one, the teacher will introduce the topic and give key words. This gives the students the chance to plan and predict what to look in the next stage. During the second stage (first verification), students will hear the audio and talk about anything new they had learned. This will also give a chance for students to assess whether their predictions were correct. Stage three is the part where students may find parts of the audio that they had misunderstood the first time. They can assess why they misunderstood to evaluate the listening problems. During the final verification stage, students will listen to the audio for the last time, listening for points they didn't understand or decode. The final stage, known as the reflection stage, students will reflect

on the strategy they used to better comprehend the audio (Bozorgian, 2014; Vandergrift & Tafaghodtari, 2010). This step-by-step process helps students understand how they can decipher foreign speech to better comprehend it in the future.

**Metacognition and listening comprehension.** Two studies on metacognition shared similar results when they worked on implementing this strategy to improve listening comprehension. Vandergrift and Tafaghodtari (2010) created two groups – an experimental group and a control group – where the experimental group was exposed to metacognitive awareness during listening comprehension activities while the control group was left to what they normally do in class. Bozorgian (2014) created a similar study without the control group. In this study, thirty EFL (English as a Foreign Language) students were taught to use metacognitive awareness when doing listening comprehension activities for eight weeks. Both studies used a pre-test and post-test to look for effects the strategy would have comprehension-wise, and they also used MALQ (Metacognitive Awareness Listening Questionnaire) to evaluate improvement of metacognitive awareness. The results were the same with both aspects of the study. Based on their pre and post-tests, they found that teaching metacognitive awareness can help improve listening comprehension for a foreign language. For Vandergrift and Tafaghodtari (2010), this means that the experimental group did better than the control group in regards to comprehension of oral texts. Both studies, however, did not see as big of an improvement with the MALQ.

According to Bozorgian (2014), this questionnaire is meant to track cognition in regards to planning, evaluation, monitoring and problem-solving. However, both studies found that the questionnaire showed little to no significance in regards to metacognitive awareness. This means that their data showed these factors to be statistically insignificant when using the MALQ. They also calculated the reliability of the MALQ pre and post-test, which was low. Li (2013) also

found the same result when using this questionnaire on his study specifically regarding metacognitive awareness. This caused the researchers to rethink how they implemented the questionnaire and how they would show it to students. Baumann, Seifert-Kessell and Jones (1992) looked at the idea of measuring behavior and thought of its implications. They found that it is difficult to accurately measure, and can be done by observing overt behavior in the classroom. This is very limiting; however, it may bring more accurate results in future research.

Although Vandergrift and Tafaghodtari (2010) did not find significance in metacognitive awareness, they did find that many listeners used problem-solving strategies to improve their listening comprehension. This means that they are noticing the problems they are having with comprehension, and they are coming up with a solution to fix the problem. They think this is the case because listeners are implicitly learning during the task and they regularly translate what they hear mentally.

During Bozorgian's (2014) discussion, he says that not only does metacognition help students improve on listening comprehension, it also helps teachers rethink how they would teach listening comprehension in the classroom. They will need to create lesson plans that highlight the process of listening comprehension rather than the results of listening comprehension. This gives the students a chance to come up with the results on their own and eventually gain the independence to do so without the teacher.

**Higher-level listeners vs. lower-level listeners.** Studies have consistently found that metacognitive strategies work better for beginning language learners versus those at a higher level (Bozorgian, 2014; Goh & Taib, 2006; Li, 2013; Vandergrift & Tafaghodtari, 2010). Goh and Taib (2006) stated that lower-level listeners were determined based on the pre-test results.

They noticed that those with lower-level listening skills showed a higher improvement than advanced listeners. This was especially emphasized with the studies of Bozorgian (2014) and Vandergrift and Tafaghodtari (2010) who showed less improvement with the higher-level listeners. Vandergrift and Tafaghodtari (2010) concluded that metacognitive strategies are particularly helpful for beginner-level students. This is because metacognitive lessons help give students the tools they need to transfer their learning so they can understand speech inside and outside of the classroom.

### **Think-Aloud**

The Think-aloud strategy is a form of metacognition, and it is related to comprehension of content. In a Think-aloud task, students and teachers are asked to articulate their thoughts to solve the problem and elaborate on why they come up with the solutions. The idea is to come up with inferences and be aware of the mental process during comprehension (Gillian, Fargo & Robertson, 2009; Trabasso & Magliano, 1996). The idea of a task-driven approach is the best way to push learners to achieve the level they desire in listening comprehension (Cross, 2009).

Explanation and prediction are both comprehension processes that are very relevant in Think-aloud tasks. Students who can paraphrase text or speech perform better on measures of comprehension (Gillian, Fargo & Robertson, 2009). This means that articulating your thoughts out loud to translate what you understand in your own words helps with long-term comprehension. Trabasso and Magliano (1996) make it clear that these processes copy the thought process that is used during normal reading, so it just takes practice before they can implement it at a normal speed. They also confirm through their think-aloud data that understanding is explanation based, and that students maintained understanding of sentences better when they were paraphrased. Students can prove they comprehend speech or text when

they can articulate their thoughts out loud in a way that is easiest to understand. Gillian, Fargo and Robertson (2009) emphasized the fact that students who created accurate paraphrases did better with listening comprehension than those who created inaccurate paraphrases. This means that repetition and practice is important when implementing this method, so that students have a chance to make mistakes and learn from them. Think-aloud is also a good way to help with comprehension monitoring abilities (evaluation of strategies). It is found that students will be able monitor their progress better than those who do not use the think-aloud strategy (Baumann, Seifert-Kessell & Jones, 1992).

**Teacher-led Think-aloud.** Teachers can put metacognitive strategies into their lesson plans to guide students to help them become independent in listening comprehension. With a teacher-led think-aloud method, teachers can “enhance comprehension monitoring abilities” (Baumann, Seifert-Kessell & Jones, 1992, p.163) and cause students to gain responsibility and control. Teachers also enhance metacognitive awareness because they ask students to report and discuss what they are thinking during listening comprehension tasks (Baumann, Seifert-Kessell & Jones, 1992; Goh & Taib, 2006). Cross (2009) discusses the importance of forms of student training in this concept, because learners may not be aware of the strategies they can use and what fits their needs personally. Training would also help students be able to implement the strategies they learn about.

Although Think-aloud should eventually become an independent process, Cross (2009) found in his study that there were moments of student-student collaboration in regards to comprehension enhancement. Cross elaborates by explaining that conditions occur where students can talk to other students about strategy use. This gives them a chance to not only learn about other strategies but it also gives students a chance to evaluate their own strategy.

## **Student-Student Collaboration**

Remedios, Clarke, and Hawthorne (2008) created two ideas for collaboration: the first idea is that students are in a public setting where they can have conversations directed to the development of the concept taught. The second idea is that all contributions need to result in a deeper understanding of the concept that previously understood by the group. Applebee, Langer, Gamoran and Nystrand (2003) talked about discussion-based approaches to help enhance literacy performance. Their study found that these approaches worked on all students, and would potentially work in all contexts with any type of student. They explain that this is because students internalize what they learn in order to engage themselves in more challenging literacy tasks in the future. Remedios, Clarke, and Hawthorne (2008) also notes that while verbal participation is important for collaboration, it is not the same thing. Collaboration is verbal participation that intends to contribute to the group when listening and speaking.

In Lones' study about videotext comprehension (2006), students were put into four groups. One group listened to the video without visuals in a collaborative setting, one listened to the video with visuals in a collaborative setting, one listened to the video without visuals in non-collaborative setting, and one listened to the video with visuals in a non-collaborative setting. The two ideas that were discussed were collaboration vs. non-collaboration, and visuals vs. no visuals. The results indicated that the group who listened to the video with visuals in a collaborative setting received the best assessment scores. This indicates that students are more engaged and can develop knowledge better when they can discuss and work with other students.

## **Gaps in the Literature**

Two gaps were found when researching this topic. The first gap is related to measuring behavior in regards to metacognitive awareness. Studies have shown that metacognitive awareness is not easy to measure with a simple questionnaire. When used, it seems to show little or no significance to metacognitive awareness, even when there is a large improvement for listening comprehension. This may be because students need more time to fully be aware of their cognitive process, but further research should be done on how to measure it in a different way. One way could be on the overt behaviors students show during tasks that relate to planning, monitoring and evaluation.

The second gap is related to Think-aloud vs. Student-student collaboration. While both methods cause students to articulate thought and both improve comprehension, one is led by an authority figure while the other is not always led. Also, the teacher-led think-aloud strategy requires students to follow a process that helps them learn how to listen. It is more complicated than just articulating thought, unlike working in pairs which often only requires articulating thought. Further research can indicate whether Think-aloud has a bigger, has a smaller or has no difference in impact compared to student-student collaboration (such as partner-work).

## **Methods**

The purpose of this mixed-methods study was to analyze the effects of the Think-aloud strategy as compared to partner-work on L2 listening comprehension. When approaching this, I focused on how it affects the students' listening comprehension as well as how the students felt about these effects. The students answered listening comprehension questions based on the assigned videos from Thisislanguage.com. I calculated the results based on their answers.

### **Setting and Participants**

This study was conducted in a middle school in Northern Virginia. The middle school has 824 students, 218 of them are male and 215 are female. Out of the total population of students 433 students are Caucasian, 162 students are Hispanic, 32 students are Asian and 153 students are African-American. This makes Caucasian the majority with Asian being the low minority in regards to population. 293 students are in 6<sup>th</sup> grade, 261 are in 7<sup>th</sup> grade, and 270 students are in 8<sup>th</sup> grade.

The group I studied is a total of 13 students. They are 8<sup>th</sup> graders, and they are in Spanish 1B. This means that they study Spanish 1 over two years and they are in their second year. Out of all 13 students, three are Hispanic, two are African-American and eight are Caucasian. The three Hispanic students are all native speakers of Spanish, and the rest are native speakers of English.

### **Data Collection**

During this mixed-methods study, I collected qualitative and quantitative data. For the quantitative section, I used a pre-test and post-test created by Thisislanguage.com to analyze their listening comprehension in class. The qualitative section consisted of student interviews. I

coded these interviews to come up with categories and generalizations in regards to how they felt about the effects of Think-aloud.

## Procedure

The students worked on their listening comprehension using Thisislanguag.com. This is a website where students can watch assigned videos and answer comprehension questions. Each video has a native speaker from a Spanish-speaking country answering a question asked by the interviewer. There are more difficult videos than others, and they are rated with a 5-star scale, with 5 being the most difficult. The site has other activities that students can use such as gap-fills, video vocabulary, and even games to work on memorization.



The screenshot shows the website interface for a video. At the top, there is a blue header with the logo 'thisislanguag.com' and a search bar. Below the header, the video title '¿Qué te gustaría hacer en el futuro?' is displayed. To the right of the title is a 'Back to videos' button. Below the title is a video player showing a man speaking. To the right of the video player are four activity buttons: 'Jigsaw', 'Video Vocab', 'Gap-fill', and 'Comprehension'. Below the video player, there is a difficulty level indicator (5 stars), a word count of 48, and view statistics (Views: 3539, Video ID: 1600).

For the Qualitative study, I started with a pre-test. Students listened to a video from This Is Language, and then they answered the comprehension questions. Here is an example of a pre-test for a 2-star video:

Q: ¿Qué te gustaría hacer en el futuro? 2:57

Start

- 1 What does 'me gustaria' mean?
  - I will like
  - I would like
  - I like
- 2 Which of these is true?
  - he would like to work in a garage
  - he would like to be a scientist
  - he would like to work in a factory
- 3 What does the word 'jefe' mean?
  - engineer
  - chief
  - operator
- 4 What does 'he eligido' mean?
  - I have studied
  - I chose
  - I have chosen
- 5 Why does he say he is studying?
  - because everybody does it
  - because he loves his subject
  - so that he can get a job in the future

For the pre-test they had a chance to listen to the video three times, and then they answered the questions individually. For the next two days, they did the listening activity a total of two times, first just working in partners. They listened to the video three times, and then they answered the comprehension questions. They then did the listening activity two more times using the Think-aloud process to better understand the content. For example, they listened to it the first time and try to articulate what they understood. The second time consisted of students talking about what they didn't understand, and maybe what they learned that they didn't learn before. This is also the chance for them to see if they want to change their strategy when listening to the video, in case the way they are thinking about it didn't work. They listened to it one more time and articulated their final thoughts on what they understood. They can also discuss their strategy and how it worked or didn't work. Students then filled out the listening comprehension questions so I could see how much they knew.

This listening activity was done a total of 5 times (Once for the pre-test, two times for the partner-work, and two times for the Think-aloud process). On the second listening activity for each strategy, I looked at the answers to calculate the effects on their listening comprehension. This means there is a pre-test for the first day, and then a “post-test” on the third day and the fifth day. The post-test on the third day is also the pre-test for the next two days. This helped calculate improvement after each of the two strategies are used.

The qualitative method consisted of student-interviews. After the last post-test, I interviewed the students one-on-one with open-ended questions. This gave the students the chance to answer the questions the way they wanted to answer it. The data was recorded to create a transcript of the data. The data was coded and categories and generalizations were created based on the students answers to the questions. The interview questions referred to which strategy they liked better and why, which helped them improve best and why, what they learned as a result of using both strategies, and what they would change about both strategies and why.

### **Data Analysis**

The pre-test and post-tests was corrected, and an average was calculated. The pre-tests and post-tests were then compared to see if an effect occurred on the students’ listening comprehension. The individual tests were also compared to see how many improved, how many did worse, and how many had no difference in test scores. The tests were calculated using a paired t-test to see if both the results of the pre and post-tests had statistical significance.

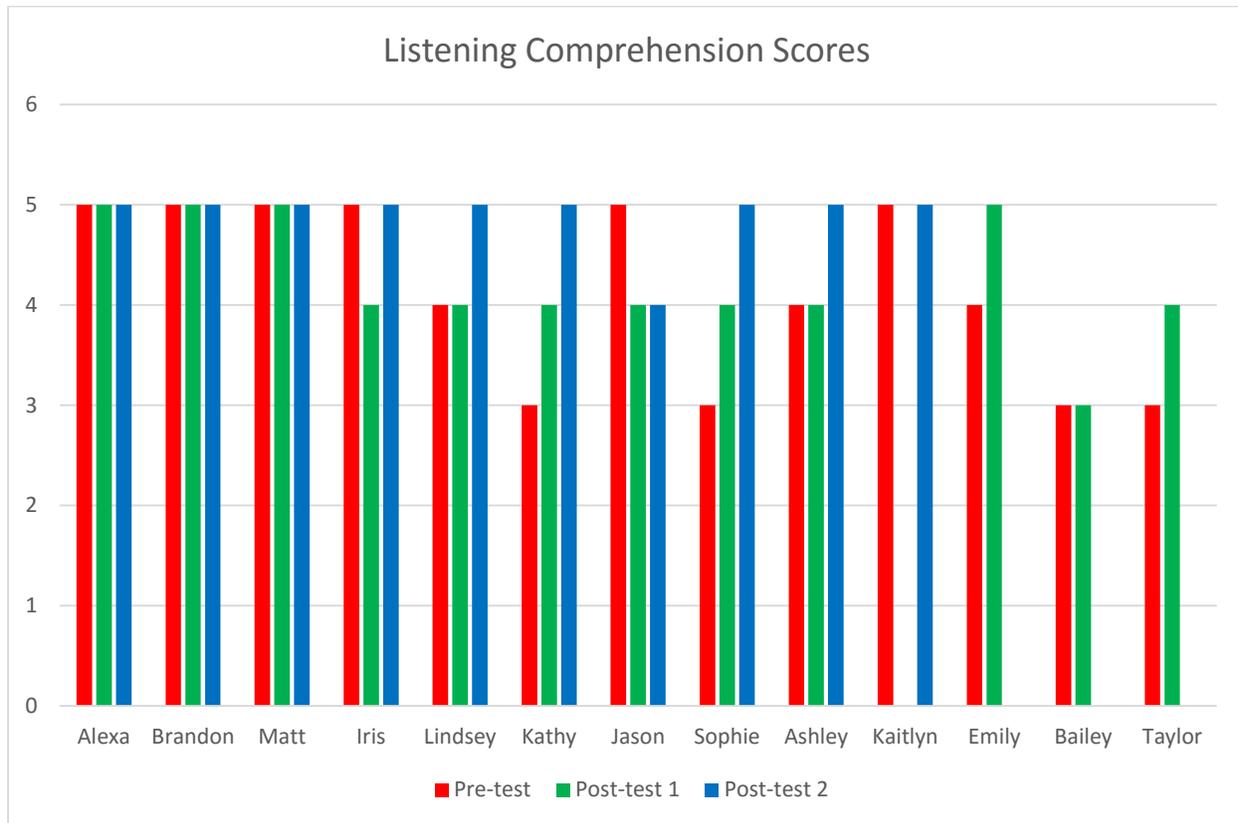
The interviews were coded to create categories in regards to the students’ answers. I wrote down what the students said during the interviews and found common themes and words to show how students were affected by both strategies. The reason I am did this is to see if the

students felt any significance when using the Think-aloud strategy versus working with partners. Creating categories provided generalizations about how students feel, and then I created a conclusion based on those generalizations.

## **Results**

### **This Is Language Results**

For my quantitative data, I collected listening comprehension questions completed by each student. For a total of five days, the students listened to a video of a native speaker for a total of three times. After listening to it three times and having some time in between to think, they answered five listening comprehension questions pertaining to the video. On Day 1, the students answered them individually and I used this as the pre-test to determine where they were at in regards to listening comprehension. Days two and three consisted of partner work, and Day three's answers are the post-test to Days two and three as well as the pre-test for Days four and five. Days four and five were all done using the Think-aloud method. After listening to the video, they would talk out loud about what they heard. Day five results were used as a post-test for the think-aloud activity. It is also important to note the difficulty levels of the videos. Day one had a difficulty level of 3 out of 5 stars. Days two through four were 2 out of 5 stars, and then Day five was 3 out of 5 stars. These are the results for each pre and post-test for all 13 students:



I used pseudonyms for each student name. Alexa, Brandon and Matt are all native speakers, so they did not show statistical improvement as they stayed 5/5 for every listening activity. Emily, Bailey and Taylor were not present during the second post-test, so there are no results from them in regards to the Think-aloud method. Kaitlyn was absent during the first post-test, so she did not provide any results for the partner work method.

Looking at the partner-work section of the graph, it shows that four people improved, two people did worse, and six people stayed the same. When using the Think-aloud method, five people improved, no one did worse, and five stayed the same. Alexa, Brandon and Matt are all three native speakers of Spanish, so their scores stayed at 100% during all the pre and post-tests. Also, it is shown that Iris did worse during the partner work activity, but went back up to her original score when doing the Think-aloud activity. Jason, however, had the best results when

doing it individually rather than using the partner-work or the Think-aloud method. Kathy and Sophie both improved the most throughout the week by starting with a 3/5 and ending with a 5/5.

Looking at these results, I did a paired t-test for both methods to calculate their significance. The pre and post-test for the partner work activity has a t-value of 0.0559. With this calculation, we can say that the means of the two test scores are not significantly different, and therefore the null hypothesis still stands. The pre and post-test for the Think-aloud activity, however, had a t-value of -3.0003 when the critical value was 2.262. This says that the means of the two test scores are significantly different, and therefore the null hypothesis is rejected. With the t-value of the partner work test scores, it is shown that doing the listening activities in partners did not help improve scores enough to be statistically significant. While some improved, others did not, and some even did worse as a result of the partner work. The Teacher-led Think-aloud activity did show statistically significant results however, and there seems to be improvement in listening comprehension as a result of the activity.

## **Interviews**

After completing all five days of listening comprehension activities, six of the thirteen students interviewed with me. One at a time, they stepped outside the classroom into the hallway to answer questions about the methods we used in class. I wrote down what they said while the interview was happening. I then looked at their answers and put them into categories that explain their awareness of the activity as well as their opinions on the methods used.

**Matt** and **Brandon** are both native speakers of Spanish, and they both live with families of native speakers. They received a 5/5 on all of their pre and post-tests, so they neither improved nor did worse statistically. When listening to native speakers speak Spanish, Matt says

he “understands them,” and Brandon says he feels “comfortable because it is easy.” He adds that he talks with his parents in Spanish a lot because it is their first language.

**Iris** is not a native speaker of Spanish, but she is a hard-worker and is highly invested in the classwork. She started with a 5/5 in the beginning of the listening activities, went down to a 4/5 during the partner work and then went back up to a 5/5 during the Think-aloud activity. She feels that she gets “overwhelmed” when listening to native speakers speak Spanish, because she has a hard time understanding the pronunciation and accents.

**Ashley** is also not a native speaker, but like Iris she is a hard worker in class and she did the partner work with Iris during Day two and three. She got a 4/5 on the pre-test and the partner work post-test, but went up to a 5/5 when using the Think-aloud method. She claims she gets “irritated” when listening to native speakers speak because they speak too quickly.

**Kaitlyn** may not be a native speaker, nor does she participate in class, but I chose her because she has strong listening skills. While she was absent during Day three and has no results pertaining to the partner work activity, she still got a 5/5 during Day one, and a 5/5 as a result of the Think-aloud activity. This means that she neither improved in her score nor did worse. She claims that listening to native speakers speak in Spanish is “easy”.

**Jason** is not a native speaker of Spanish, and while he participates in class he still struggles with the language. He started out well at a 5/5 when working by himself on Day one of the listening activity, however when doing the partner work and the Think-aloud activity, he continued to score lower at a 4/5. He is the only one who did worse when participating in both methods. When listening to native speakers speak Spanish, he says it is “very confusing” because

they talk fast, the accent makes it “difficult to understand things”, and the words are “hard to catch”.

### **“This is Language” Listening Activity**

“This is Language” is a site that exposes students to the voices of native speakers. These videos are rated in level of difficulty based on how much a beginner level student would be able to understand each video. They are also from different countries, so some of the accents are different, and their talking speed is different as well. All six of the interviewees said they have weaknesses when it comes to listening comprehension. Iris mentioned that the accents are difficult to understand, and Jay finds it hard to find the key words necessary to answer the listening comprehension questions. Ashley mentioned that she focuses too much on one word and doesn’t pay attention to everything else, and Kaitlyn says it is easier when she knows what to look for before listening to the video. The native speakers both had different opinions about their listening skills, however. Matt says that there are times when sentences are worded differently and it confuses him, but Brandon feels that he has no weaknesses because listening is easy.

During the interviews, I found that four out of the six interviewees felt they improved when using this site. Jason did not feel that the site helped him because it was too confusing, and Brandon felt he didn’t improve because he is already good enough when it comes to listening comprehension. The other four had more positive opinions, however. Ashley feels that listening to a native speaker improved her listening skills, and Kaitlyn and Iris felt their confidence has improved after doing these activities. Matt, who is the other native speaker, said that the listening comprehension activities helped him to pay more attention in class.

Looking at their responses, it can be said that the students generally felt that listening to a native speaker challenges them in some way. Many felt a positive feeling, while others felt the challenge gave them too much anxiety. It might take more than five days of activities to get the students accustomed to its difficulty, so doing this activity for a longer period of time could be more helpful.

### **Partners vs. Individual**

During the interview, I asked them whether they preferred to work individually or in partners. Five out of the six students said they prefer partners. Jason was the only one that preferred individual work, because he likes a quieter environment. Even though Jason is the only one that prefers to work by himself, he and all the other interviewees do understand the benefits of working with another person. Jason specifically felt that working with someone who knows more than him helps him understand the activities better. He feels he can fix his mistakes when he has someone else to guide him.

Ashley feels having a partner helps when she doesn't know something, and it makes her think harder. Kaitlyn and Iris both like to work in partners because they can compare their answers to someone else and get a second opinion. Matt and Brandon both feel that they can rely on their partner if they make a mistake or when they don't have an answer. After saying why, he likes working with partners, Matt made it clear that working with partners helps him think less and that it is less confusing.

Generally, it seems that almost everyone prefers to work in partners. They feel the benefits of partner work outweigh the benefits of individual work, however like Matt said, they may not be challenged as much when working with a partner because they technically are using

two brains instead of one. Jason also explained that having someone who knows the content well can help you have the right answers. While that can be beneficial, it might not be as challenging when that partner gives all the answers. When comparing to the qualitative data, we can see that while there is a slight increase in improvement when doing partner work versus individual work, it is not significantly different enough to show which one actually helped the class more. This shows that the interviewees may feel that partner work helps them in class, but there is not statistical data to prove their beliefs.

### **Think-aloud**

During the last two days of listening activities, the students used the Think-aloud method. This method was done as a class and everyone was able to put input in throughout the activity. After listening to the video the first time, they talked about what they heard (what words, what phrases, what they might mean). After the second time, they talked about anything new they heard, as well as what they need to listen for next time. After the third and last time listening to the video, they talked about anything they are certain about, as well as what they missed and how they would listen for it next time they do the activity. This method worked out for almost all of the students, as their pre-test and post-test results were significantly different from each other. Even though these results were positive, the interviews showed a negative reaction to the Think-aloud method.

### **Think-aloud as a class**

During the interviews, I found that the students did not like doing the Think-aloud activity as a class. In fact, five out of the six interviewees said they preferred working in partners rather than doing the Think-aloud activity. Jason thought it to be noisy, and

he had trouble concentrating when many people were talking at once. He also mentioned that many people around him said opposite ideas, so he was confused as to which idea was right. In other words, it confused him when people kept contradicting each other. Ashley thought the students around her would talk about topics that were not relevant to the activity, and so she felt that it was not a productive method. Kaitlyn felt that it is easier to work with one person rather than working as a group. Iris was the only one who preferred the Think-aloud method to partner work, because she can hear why people have the ideas that they do, and she can use that evidence to help her reasoning.

In the literature, there is talk about how students need to be trained in metacognitive awareness, and that they do not pick it up right away. This seems to be true for this group of students because they believe they did better in the partner work, when the majority of them actually did better with the Think-aloud method. For example, Ashley did better with the Think-aloud method, but she preferred doing partner work. Iris, however, was accurate by saying she did better with the Think-aloud method. Jason's conclusion that he does better individually is also true since he did worse when using both the partner work and the Think-aloud method. This shows that they may need to do this activity for a longer amount of time to train them in metacognitive awareness.

The students also suggested improvements to the "Think-aloud as a class" method, specifically regarding productiveness. Jason and Iris felt that it would be better if everyone gave input all three times. Kaitlyn felt people should explain their thoughts better, rather than just saying what they think. Matt said it would be better if the volume of the classroom was lower, and Ashley was the only one who said it should not be used at all. She felt all of the focused ones would say what they thought, and the ones who weren't paying attention just copied off what

they said. Brandon was the only student who said it does not need improvement. He is also the only one who said he wouldn't need to do it to get a good grade on listening comprehension activities.

### **Think aloud as an individual**

During the interview, I asked the students if they would use Think-aloud in the future. I specified that Think-aloud means to say what they are thinking out loud to articulate their thoughts better. I also pointed out that it does not need to be with someone else, that they can do it by themselves too. Five out of the six interviewees said that they would use Think-aloud in the future. Ashley specifically mentioned that she can find her mistakes when she Talks out loud. Marlon also said that it helps his ability to communicate when he can articulate what he is thinking. Jason was the only one who did not find Think-aloud helpful, because he feels he works better in a quiet environment. Overall, it seems that the students enjoyed using Think-aloud, and it is a strategy they would use in the future, but the majority of them would not like to do Think-aloud as a class. They would rather do it individually because they feel it is more productive when they work on articulating their thoughts by themselves.

## Discussion

An analysis of the listening comprehension questions answered by students, and the interviews from six of the students revealed differences in results for partner work and Think-aloud. It also brings metacognitive awareness to light and how it plays in this context.

### Comparing quantitative and qualitative data

When looking at the results for the listening activities, there seemed to be a significant difference in results between the partner work and the Think-aloud method. Partner work did not significantly improve the students' results as a class, but the Think-aloud methods did significantly improve their results. While there were some who received a 5/5 on their listening comprehension activities right away, all of those who took the Think-aloud test (except one) received a 5/5. The Think-aloud method showed statistical improvement when calculating the t-test.

The interviewees generally felt that the listening activities helped them with their listening skills. The students especially felt that the partner worked helped them more than the Think-aloud method did. They felt that talking to another person helped them keep track of each other's mistakes, and help each other improve. They said that the Think-aloud method caused people to get out of focus and many people tried to use the answers of those around them rather than use their own.

The most important thing to note when comparing the data is that the opinions of the students did not match the results. They thought the partner work helped them more than the Think-aloud method, when according to the quantitative data the exact opposite became true. Baumann, Seifert-Kessell and Jones (1992) talked about how difficult it is to measure

metacognitive awareness in students, and that overt behaviors could be a way to observe any characteristics that might be tied to it. The fact that the students' results did not match with their opinions during the interviews shows a general lack of metacognitive awareness for most of the students. For example, Jason felt he did best individually rather than doing the partner work and the Think-aloud method and he was correct. However, while Ashley felt that she did better when doing partner work, she actually did better when using the Think-aloud method. This implies that students may need more time to grow in their general metacognitive awareness.

### **Improving Listening Comprehension**

The reason for doing this research was to find a method to help improve listening comprehension. The Think-aloud activity helps students to understand how they are thinking in order to change their thought process to make it more productive for the activity. Through doing the activity multiple times, it can be said that Think-aloud can change how the students think. While the activity was used a total of two times, it improved their scores, and all but one student received a 5/5. The difference in the pre-test and post-test is very significant, and part of it might be because it is new. It is something the students never did before and it changed their view on the listening activity. If the students used the method every time throughout the year, the students might not be as consistent in improving their listening comprehension.

During the listening comprehension activities, all three of the native Spanish speakers received a 5/5 on all of the pre and post-tests. In other words, there was no room for them to improve. The listening activities the students did were too easy for them, so they were not challenging themselves, and they did not have to think as hard as the other students. When doing

the activities in the future, it might be important to differentiate the activities to challenge the native speakers, such as giving them a harder video, or answering more challenging questions.

### **Think-aloud Method**

The students did the listening comprehension activities five times in class, but only used the Think-aloud method two out of the five times. While there was significant improvement the second time, this does not necessarily mean that it will consistently improve like this when using it more than twice. This also was very new for the students, so they were open to doing something different. If the research was done more than twice, the results might have been different. If the research was done throughout a longer period of time, there might be more accurate results.

This activity requires to have metacognitive awareness throughout the entire activity. This means that students need to understand how they are thinking when doing the listening activity so that they can change and improve their thought process. This is a strategy that takes time to implement in the classroom, and they need time to be trained. Though they did well throughout the two activities, they may not always do that well overtime. To get consistent and accurate scores, students will need to do these activities for a longer period of time. Also, the age group of the students in this data set is very young, so they most likely do not have the ability to use metacognitive skills to begin with. It would be interesting to see what the effect of Think-aloud method would be for older students, such as high school students.

The students brought up important points throughout the interviews regarding Think-aloud as a class. They thought of many ideas to consider. One important concept was the idea of using the ideas of other students. Ashley specifically felt that Think-aloud should not be done as

a class because students might not focus on the task except when they are copying the answers of those who are focused. Jason and Kaitlyn also suggested that each student should put input in one at a time. They feel having everyone's input would be more productive for the classroom, and everyone would have to think about how they would respond. When using this activity in the future, the teacher may need to consider the language level of the students, and if they need to work as a class or if they will benefit more individually. This is a technique that needs to be scaffolded, so it is important to monitor each student to make sure they are on the right track as an individual.

### **Limitations of the Data**

One limitation that is important to note is the listening comprehension pre and post-test. For the sake of the class of students and their beginning level Spanish ability, they only had five questions to answer when doing the activity. Without over-complicating the situation, researchers might benefit by putting more questions in the quiz to create a higher range of results. This can be done by letting the students watch a longer video, for example.

Another limitation was the amount of times each method was used. The students could only do each method twice, which usually is not enough time to create accurate and consistent results. The students might also benefit from doing this for a longer period of time to train their minds and understand the routine better. This would also help them when it comes to interviewing, because they might have a better understanding of the method if they used it longer and more often. Also, Differentiation was not considered when doing this research. Those that already did well on the activities had nowhere to keep improving, and therefore stayed stagnant

throughout the process. This can be changed by showing different videos to different groups of people, or by giving more challenging questions to those who are ready for them.

Lastly, the variety of questions and videos needs to be considered. Since the videos will never be the same for each activity, there is a chance that some videos will be harder or easier for each student. This might contribute to the overall results. When doing further research, it will be important to think about the content of the videos and the questions asked in the pre-test and post-test. If the videos and questions are consistent in content and difficulty, the results could be different.

## **Conclusion**

Throughout the data and results, it can be said that the Think-aloud method did affect the students' L2 listening comprehension. The results of the quantitative data showed that they improved their results when using this method. Even though the Think-aloud method seemed to help, the students did not feel the activity was productive. This can be a sign of a lack of metacognitive awareness, so long-term training may be necessary to help the students in this area. Further research could be done regarding the age of the students and their metacognitive awareness.

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