

**TOP-DOWN AND BOTTOM-UP PROCESSING IN LISTENING.  
WHICH ONE IS PROBLEMATIC?: A CASE OF  
UNIVERSITAS PGRI SEMARANG**

**Sukma Nur Ardini**  
*Universitas PGRI Semarang*  
[sukmanurardini27@gmail.com](mailto:sukmanurardini27@gmail.com)

**Abstract**

To enhance students' ability in listening skill, the lecturer needs to understand what problems faced by their students. Since listening is still a big issue for English learners in Indonesia, so the processing of Top Down and Bottom Up need to be figured out. Top-Down processing refers to the use of schemata or knowledge of learners to understand the information received, while the Bottom-Up processing refers to the process of understanding the information through the analysis of sound, sense of the word, and grammar. This study wanted to investigate what problems do students have in learning listening since the observation result showed that students' listening grade is low. A case study research design was applied in this study. Thirty students of first semester of *Universitas PGRI Semarang* in the academic year 2015/2016 became the sample of this study. The data were collected through observation, questionnaire, and interview. The result showed that 90% of the students found that Bottom Up processing is more problematic than Top Down processing (10%). The interview result showed that 44% students have difficulty in vocabulary and 56% in pronunciation. Those problems make them difficult to catch what the speaker says. It leads to another problems that is Top Down processing which needs Bottom Up as the basic competence. Therefore, it suggests to lecturer that Bottom Up, which involved vocabulary and pronunciation, is matters for students to achieve the listening competence well.

**Keywords:** *top down, bottom up, processing, listening competence, problem*

**Introduction**

English is introduced to the students in Indonesia since kindergarten. It is proof that English is an important subject for students and required to be mastered by the students in all academic level. Further, English is needed for socialization, communication, and the development of knowledge. Up to higher education, lots of difficulties in

the English learning process remain. It is caused by the main factor that English is not the Indonesian's mother tongue. So it is hard for Indonesian to learn word form, pronunciation, grammar, and the meaning which are integrated into four English skills that have to be mastered; reading, writing, speaking, listening.

From all the English skills that

have to be mastered in learning English, it is important to understand the basic skill among them all that is listening. Underwood (1989:1) stated that listening is an activity of observing and trying to get the meaning of something heard. It is a complex process that allows our brain to build the meaning of voice they heard and to understand language. According to Howatt and Dakin (1974), listening is an ability to identify and understand what other people said. This process involves understanding the accent of the speaker, the pronunciation or grammar of speaker, vocabularies, and understanding the meaning. Based on the definition of listening above, the students must be able to process what is heard in learning listening then they try to give the meaning. Hence the listening skills influenced by vocabularies, pronunciation, and the meaning of words or sentences which are called Bottom Up and Top Down.

When students are not able to accomplish those tasks, they are failed of listening skill. It happened in listening classroom of the first semester students in *Universitas*

*PGRI Semarang* in the academic year 2015/2016. The observation result showed that the average listening grade were 59 which is considered low. The urgency leads the researcher to conduct the current study which is aimed at finding out the problems faced by the students in learning listening.

### **The Problem in Learning Listening**

According to Ur (1984), there was some problems that founded by students when they did a listening study: (1) they cannot understand certain English pronunciation, (2) did not know how to overcome a redundancy, (3) they cannot predict a meaning from the language because they did not get used to the patterns of word, did not understand daily vocabularies, (5) could not maintain the speed of listening, (6) experienced the difficulties of understanding other accents, (7) lack the ability to use basic surroundings knowledge to get the meaning from listening delivered.

According to Underwood (1989:15), some difficulties from listening for the student are (1) The listener cannot control the speaker's

speed that delivered the message, and they feel the message delivered is gone before they can understand the content of that message. When they finally understand the meaning, another message can be disappeared at that moment too. (2) The listener does not have a chance to ask the speaker to repeat or give a clarification of the delivered message for example when they listen to the radio or watch the TV so the listener have to understand as what it is (3) Lack of vocabularies the listener had make they can not understand the content of the text they heard even make them become bored and frustrated (4) The failure of listener to recognize the 'signs' delivered by the speaker that cause the listener to misunderstand the content of message they get (5) The misinterpret of the delivered message, so the content of the delivered message can be differently accepted or interpreted by the listener (6) They cannot concentrate because many things such as uninterested topic, physical exhaustion, noisy surrounding, etcetera. (7) The concern in the difference of the method or the material that the teacher give to the heard material in an audio device or

English native speaker.

The student's problem in listening comprehension can be caused them some difficulties to master the other skills in English. It is because if the students cannot understand what they heard, they cannot have a good ability in speaking to respond to what they heard.

### **Top Down and Bottom Up Processing in Listening Comprehension**

The strategies that can help the student to overcome the problem in listening comprehension is to apply the Top-Down and Bottom-Up processing on classroom learning. Top-Down processing in listening involves the liveliness of building mean based on presumption, conclusion, purpose, and other relevant knowledge. Bottom-Up in listening is more detail in grammar and the meaning of words.

As stated by Gebhard (2000) who divides the information process to two categories are Bottom-Up processing and Top-Down processing. Bottom-Up processing refers to the understanding of the information process by sound

analysis, word meaning, or grammar. Meanwhile, Top-Down processing refers to the using of schemata or the knowledge to understand the given information. The schemata relate to the speaker's daily experiences about the heard topic. In other hand, Helgesen (2003) states that there are five basic principles in listening learning such as (1) teaching students in two ways of information processing (Bottom-Up and Top-Down processing), (2) teaching students about kinds of listening, (3) teaching various assignments, (4) consideration of difficulty and authentic text, (5) teaching various types of listening processing, for examples guessing, drawing conclusion, monitoring, clarifying, responding, and evaluating.

From various strategies and basic principles of the listening session, the student can be given Top-Down and Bottom-Up processing. Wherein combining the two strategies, increasing the ability of Listening Comprehension by building student knowledge from daily experience, then also trying to understand the meaning of each word and grammar.

## **Methodology**

The current study used case study research design since it describes phenomena in order to meet the objective of the study. The site of the study is in *Universitas PGRI Semarang* along with thirty (30) students of the first semester in the academic year 2015/2016 who subjected to accomplish listening 1 lesson.

The data were collected through observation, questionnaire, and interview. An observation was conducted during the teaching and learning process for the odd semester was done, so the researcher was able to get the average grade of listening 1 lesson from the lecturer. The questionnaire was also distributed to the students to answer the objective of the study which includes top down and bottom up questions, as well as the element of those strategies including vocabulary and pronunciation. The last step to collect data was interview. The researcher interviewed 10 (ten) students in order to get deeper information dealing with their answers in the questionnaire sheet. Then, they were analyzed descriptively to make the findings and

interpretations.

### Findings And Discussion

The researcher conducted the observation during the teaching and learning process for the odd semester. The researcher sought the average grade of listening 1 lesson, so she can determine that the students must have problem in learning listening. The observation result was shown as follows:

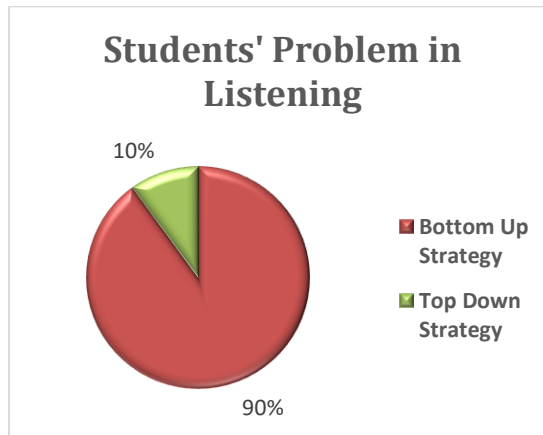
NO	NAME	GRADE
1	SINDI IRZA	60
2	PUTRI AYU	58
3	SALSABELA HASNA	60
4	IQLIMA	43
5	MUTIARA HERLINDA	65
6	ERLINA DAMAYANTI	65
7	KARINA	52
8	SITI NUR HIDAYAH	63
9	LAILY SHIDQIYAH	63
10	ADITYA	63
11	ULFA	63
12	NISRINA	43
13	DZINNURAINI	45
14	NATASA VENANDA	33
15	NIKEN ASTUTI	63
16	FARIKHATUL ISLAKHAH	43
17	FIKA FAJRIANI	70

18	DIYA YANUA	68
19	ANGELA FITRI	55
20	ANDHIKA PUTRA	50
21	DINDA SETYA BUDI	58
22	SENDY RIZQA	78
23	MARCELL	85
24	SHINTA KARTIKA	83
25	MUH NOOR BASUKI	43
26	ELVIRA RIANA	58
27	ANGGITA	68
	<b>AVERAGE</b>	<b>59</b>

**Table 1. The Grade of the Students in Listening 1 Lesson**

From table 1, it is seen that the average grade of the first semester in listening lesson is 59 which is considered **low**. The lowest grade was 33 and the highest one was 85. This point is where the researcher tried to find out the problems faced by the students.

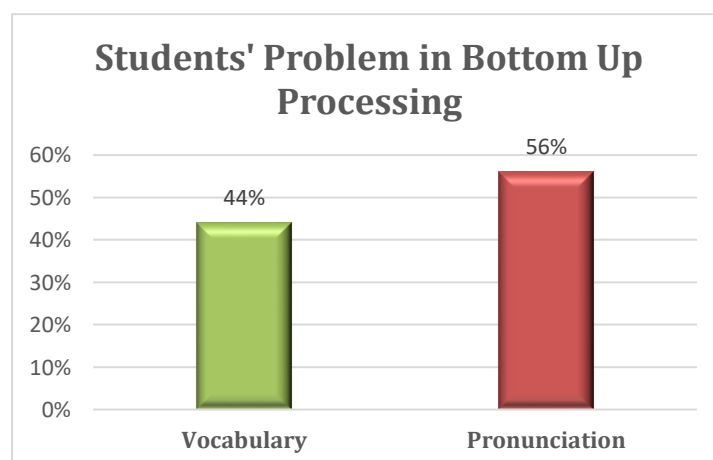
The second data got by the researcher were from questionnaire which involved the top down and bottom up processing also the element of the listening skill including vocabulary and pronunciation. The questionnaire result was shown as follows:



**Figure 1. The Result of Students' Problem in Listening**

By getting the current data, the researcher got the answer of what problems faced by the students in learning listening. The result showed that students' problem in listening is mostly Bottom Up processing which takes 90%. It means the students are having problem in understanding the information process by sound analysis, word meaning, or grammar rather than Top Down processing which takes only 10%. It means the use of schemata or the knowledge to understand the given information is not big issue for the students.

The researcher did interview in order to get deeper information from the students related their answers in the previous data collection that is completing questionnaire. This step was to breakdowning the Bottom Up processing to get the detail information of what elements were considered difficult for the students. The interview result was shown as follows:



**Figure 2. The Result of Students' Problem in Bottom Up Processing**

This data was done to find out the specific problems faced by the students in the Bottom Up processing. The result was categorized into two; vocabulary and pronunciation which are chosen as the most problematic issue for students in learning listening. The highest problem is pronunciation with the percentage of 56%, and vocabulary also need to be considered because it takes 44%.

### **Conclusion**

To enhance students' ability in listening skill, the lecturer needs to understand what problems faced by their students. Since listening is still a big issue for English learners in Indonesia, so the proces of Top Down and Bottom Up need to be figured out. Top-Down processing refers to the use of schemata or students' knowledge in understanding the information given, while Bottom-Up processing refers to the process of understanding information through sound analysis, word meaning, and grammar.

The result of the study showed that students are mostly difficult in processing bottom up (90%) rather than top down (10%) since bottom up

refers to the process of understanding information through sound analysis, word meaning, and grammar. It also proven by the result of the questionnaire which showed that pronunciation was the most problematic one (56%). Further, vocabulary was also problematic if it is seen from the amount of percentage that is 44%. The pronunciation matters include accent, speaking speed, joining sound, while the vocabulary matters include grammar and the phrase structure.

### **Suggestion**

Based on the findings above regarding to enhance the listening skill, it is important to understand bottom up processing and top down processing so the lecturer can apply both processing in order to train the students to achieve the targeted competence. By understanding this, lecturer will be no longer focus only one to the other. These processing also needs to be realized in designing the syllabus so at the end of the learning process, students are able to achieve all of the processing and ready to accomplish the next level of the lesson.

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