

INCORPORATING HIGHER ORDER THINKING SKILLS INTO TEACHING ACADEMIC SPEAKING FOR UNDERGRADUATE STUDENTS

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ABSTRACT

For teaching of speaking classroom, there are various methods and approaches. English speaking ability has been regarded as a problematic issue in undergraduate students. There has been interesting research in inserting higher order thinking skills into teaching speaking. This study aims to reveal how the teacher incorporates higher order thinking skills in teaching academic speaking for university students and to show the evidence of higher order thinking skills in students' academic speaking performance when certain strategy is used by teacher. Furthermore, the explanation of higher order thinking skills were based on Saifer taxonomy (2018). This study is a qualitative study. It investigates the process of teaching and learning speaking which focus on incorporation higher order thinking skills. The investigation done by participants in natural setting in the classroom. The data were teacher's actions in infusing higher order thinking skills while teaching speaking and students' speaking performance as the evidence of infusion HOTS when the teacher used certain strategy. The research participant involved teacher of speaking classroom and 20 students English education department. The findings of the study are the teacher did infusion of higher order thinking skills in terms of critical thinking and creative thinking skill using questioning strategy. Critical thinking skills that the teacher infused are parse, evaluate, infer, shift perspective and transfer skills. Meanwhile, the creative thinking skills are imagine, interpret, theorize, reframe and generate skills. The incorporation of HOTS conducted in academic activities. Such as, presentation, discussion and debate. The infusion of higher order thinking skills by the teacher give positive impact to students' speaking performance. The students are questioned in terms of employing higher order thinking skills in delivering speaking. The evidences prove that students are able to do so.

General terms- Thinking Skills, English as Foreign Language, Teaching Speaking

KEYWORDS: Higher order thinking skills, Academic Speaking, Undergraduate students.

1. INTRODUCTION

Speaking is a constructing meaning interactive process which comprised producing and receiving information (Brown, 2008). Speaking is regarded at the heart of second language learning among the four language skills (Egan, 1999). One assumption of the foundation for teaching English is the spoken, rather than written (Xu, 2014). According to Xu (2014), many experts appealed that the main form of language and writing depends on speaking. As the result, the common issues are faced by English language learners' specifically Indonesian learners are not able to transfer their understanding or ideas orally. But, they can apprehend what they read and write. Also, the

probability is fewer in making mistakes on writing and understanding the text, rather than in speaking.

In Indonesia, students of English department are expected to highly competent in delivering their thoughts in spoken or written performance. In particular, Indonesian undergraduate students have to deliver their ideas in academic context academically and critically. Delivering ideas in academic context is related to academic speaking. Academic speaking is similar in many ways to academic writing (Imaniah, 2018). In academic speaking, students of undergraduate are not only pulling their ability in collaborative work, but also involving in some interactional language used, such as practice in making presentation, take part in discussion or debate on academic topics. Students' speaking ability will be improved toward academic speaking activities, such as discussing on academic topics, making presentation and debate (Ahmed & Alamin, 2014). However, a previous study by Imaniah (2018) revealed that undergraduate students find the difficulties in delivering academic speaking. To prove, Imaniah (2018) mentioned factors in affecting students' speaking performance and revealed effective way to teach academic speaking.

Dealing with teaching academic speaking, teacher of English department has responsible to engage students' ability speak in academic context which is one of the main objectives in teaching oral communication (Nguyễn & Nguyễn, 2017). In Indonesia, undergraduate students of English department are expected to master English in terms of oral or written. Therefore, in delivering academic speaking, students do not only focus on grammar, pronunciation, fluency, and accuracy, but also they have to incorporate their thinking skills such as critical and creative thinking skills to improve their ideas in academic context.

To achieve students' speaking ability in academic context, they needs to involve their thinking skills. Thinking represents a cognitive process (Mainali, 2012). According to De Bone (1987), thinking in general terms can be defined as the operating skill with intelligence acts upon experience. Kallet (2014) defines thinking as the process in solving the problem, making decisions, generating new ideas and being creative that used by every human being. Thinking skills refer to express a preference or state a fact which take conscious effort (Butterworth & Thwaites, 2016). Thinking skills in education are pedagogic approaches that can be taught or learned through specific methods to make learning more effective and efficient (Bastos, 2017). In order to engage students' speaking performance effectively and academically. Hence, in process of teaching language, teacher of English department has a role to teach academic speaking which consider to incorporate thinking skills with certain strategies.

Thinking skills have three categories based on the taxonomy of thinking skills by Saifer (2018). Higher order thinking is the highest level in thinking skills taxonomy. The abilities to think critically and creatively are higher order thinking skills category (Saifer, 2018). Critical thinking skills assist students to analyze more actually than just obviously. In addition, students also assist not only to

know, but to really understand and comprehend. Critical and creative thinking skills are used in thinking processes. According to Saifer (2018), critical thinking skills consist of parse, evaluate, infer, shift perspective and transfer skills. Meanwhile, creative thinking skills consists of imagine, interpret/synthesis, inductive/theorize, reframe and generate skills. In line with those skills English teacher have responsible to incorporate them in teaching English. As the result, students' speaking performance are engaged.

The efficient incorporation of higher order thinking skills demands present educational methods carefully considered. It is applied in learning environment to trigger the student-centered education (Thomas, & Thorne, G., 2009). The instructional technique requires higher order thinking skills by fluctuating concepts, topics and situations in the process. As the result, students can practice their newly acquired skill (Mainali, 2013). In the research connected to higher order thinking skills,

the experts conclude that thinking skills approaches could be more efficient in classroom setting. In addition, thinking skills can be enhanced by explicit practice (Nguyễn & Nguyễn, 2017). The practice of higher order thinking skills in teaching speaking need certain strategy, since higher order thinking skills are significant part of teaching and learning (Subramaniam, 2016). Therefore, certain instrument or strategy are needed by teachers to assist their students' speaking improvement dealing with incorporation of higher order thinking skills.

Higher order thinking skills can be seen if students are faced with unusual issues, uncertainties and dilemmas (Bastos, 2017). In this case, memory of students is not the exact way to assist learners in this situation. As the result, critical and creative thinking are required. Critical and creative in finding ideas are the keys of learning, as the requirements of higher order thinking existence (Heong et al., 2012). In practical, higher order thinking skills are not stated clearly in learning objective. Therefore, English teachers and educators had been challenged to find the appropriate way in ensuring that learners learn language practical and theoretical with incorporating higher order thinking skills.

Some studies related to current issue of higher order thinking skills in teaching speaking have been conducted by Heong (2012). He found the issue of university students often complained due to failing to perform the high-level thinking skills in spoken English. As the result, they have lack in speaking skill which is influenced by low motivation in learning, lack of authentic materials provided, classroom settings and the objectives unable to provide the application of high-level thinking skills. Through mixed methodology in analyzing the students speaking performance, the researcher sum up the necessities of using higher order thinking skills. It shows that the keys of learning are being critical and able to find ideas (Heong et al., 2012). Based on the issues and findings, those are effective to improve students' interest, motivation, and higher level of thinking in speaking skill.

The following study was done by Sibing, Xu (2014). The study focus on incorporating higher- order questions into speaking activity. The research is a case study of L2 learner's speaking proficiency and higher order thinking. The researcher found the phenomenon that English speaking ability has been regarded as a problematic issue in L2 learning. Through incorporating higher- order questions, the finding shows students can talk longer and produce longer sentences. In addition, for speaking proficiency, students show an effective thinking process become more active and produce sentence naturally and coherently (Xu, 2014). The research is beneficial in term of strategy in incorporating higher order thinking skills. Although, the research focuses on teaching higher order thinking in speaking. It is required to be more specific in revealing of speaking skills. For instance, academic speaking in specific level of students. Therefore, deeper investigation are needed to investigate dealing with incorporating higher order thinking skills using certain strategy in academic speaking in undergraduate students.

In line with Sibing, Xu (2014), in present study find similar phenomenon about speaking skill, in particular academic speaking. Preliminary research has been conducted by the researcher in English department. The department offers Spoken English, goal of the subject is students are expected to be able to speak English fluently, critically and academically. Because of that reasons, they need appropriate approach and strategies in teaching and learning academic speaking. Also, the teacher stated clearly in learning objectives about incorporating higher order thinking. The learning objectives, such as students are able to create a perception about issues orally; students are able to compare specific topic into their own context; students are able to find the problem solving in some case given by the teacher. The learning objectives created to improve students' thinking skill in delivering academic speaking. The lecturer taught students of English department in intermediate level. In addition certain strategy use in improving students' higher order thinking skills while learning academic speaking.

Dissimilar Xu (2014) and Heong (2012), the research are conducted by Nguyen (2017) and Widana (2017) examined on the impact of higher order thinking skills instruction explicitly on students' English language learning. The difference is that Nguyen (2017) included the data presentation section in her analysis and focused on influence and the relationship higher order thinking and students' academic performance. Meanwhile, Widana (2017) spotlighted higher order thinking skills sub-skills in his analysis which were performed differently by students with different level of proficiency. However the focus of both study is higher order thinking skills in speaking, but still, do not explain the evidence and the exact strategies of higher order thinking skills in teaching speaking. Additionally, library-research of higher order thinking was done by Nagappan, Rajendra (2001) that study reveals in detail of conceptual framework of language and the enhancement of higher order thinking skills. In addition, provided an overview of research methods deals with higher order thinking and language teaching, in particular teaching specific language skills. The researcher offered an overview of research methods and employ qualitative methods for further research.

Based on the previous explanations and studies, none of these research tried to learn how the teacher incorporates higher order thinking skills in academic speaking, especially in undergraduate students. This present study investigates how teacher incorporate higher order thinking skills in teaching speaking of undergraduate students. Also, this study reveals students' speaking performance as evidence of higher order thinking skills when certain strategy used by lecturer. Because of that reasons, this study involved teacher who teaches speaking in university and students of undergraduate who takes speaking classroom with the teacher. Therefore, the data in this study will be gathered during classroom activities which in academic context, such as discussion and in the process of presentation. Based on the background above, the researcher need to achieve the aim of the study in portraying incorporation of higher order thinking in speaking. Therefore some research questions of this research are stated:

1. How does teacher incorporate higher order thinking skills into teaching academic speaking for undergraduate students?
2. What are the evidence of higher order thinking skills in students' academic speaking performance when certain strategy is used by lecturer?

2. MATERIALS AND METHODS

2.1 Research Design

In this study aims to see incorporation of higher order thinking skills in teaching academic speaking and to reveal the evidence of higher order thinking skills in students' academic speaking performance when certain strategy is used by teacher. The researcher did not establish an artificial situation and control the participations' action in teaching and learning process to achieve objective of the study. According to Fraenkel and Wallen (2006), the aim of qualitative research is to know how things happen without interference by going to the natural environment. Therefore this study is qualitative research,

According to Bordens & Abbott, (2011) a methodology aimed at developing theory and explaining what was experienced through reality observation and interpretation is qualitative method. Based on the objectives of this study in the previous chapter, it has two research questions. In addressing research questions, qualitative descriptive is research design used by researcher in this study. This study conducted to explain how the teacher incorporates higher order thinking skills in teaching academic speaking for university students and to show the evidence of higher order thinking skills in students' academic speaking performance when certain strategy is used by lecturer. This research included in classroom research as the significant of higher order thinking. The researcher in this study did not involve directly in the teaching and learning process. She only sat in to observe the teachers' actions in learning activity. The researcher focused on teacher's way in incorporating HOTS during learning process. In addition, students' speaking performance as the evidence was also aspect that researcher focused on.

2.2 Object of the research

According to McMilan (2008), the subject is a person whom data are collected, whose behaviors are used as data. The subject of this study were English teacher and students of undergraduate in English department. The first subject was a teacher who teaches speaking in English department. The teacher was chosen as the participant of this study based on several consideration. The first reason was the lecturer taught speaking in English Teacher Education Department. The second was the lecturer taught speaking which consider in incorporating students' higher order thinking skills that showed in the objective of the lesson. The last consideration, the teacher was woman who has taught speaking previously. Therefore, it reflected the capability of the teacher in engaging the course taught.

The following subject of this study were undergraduate students of state university in Surabaya. They were 20 students which consists of 8 males and the rest were female students. They were students of English as Foreign Language (EFL) in English Teacher Education Department who were required by the university to learn English for educational purposes. The students took Spoken English classroom in the first semester. During the process of teaching and learning, almost all students were active in each activity. The researcher took data deals with students' performance randomly. During the process of observation, the researcher did not has any involvement or direct interaction with the participants.

2.3 Research data and instruments

The data of present study used two kinds of data. The first data in terms of verbal data was the teacher's action on how incorporated higher order thinking skills to students for EFL academic speaking. The researcher of this study gathered the data in terms of utterances or spoken by teacher from opening until closing classroom. Such as, teacher gave questions in warm-up stage, delivered instructions in the presentation, discussion and debate section, guided students to take conclusion, and gave feedback. The second data was verbal data of students' performance. The data in terms of utterances of students in delivering academic speaking as evidence of incorporation higher order thinking skills. The data deals with students' utterances were gathered when they were answering teacher's questions in warm-up stage and having classroom discussion, presentation, and debate. The researcher involved description of events based on field-notes and transcriptions of video recording as the source of data.

The study applied non-participant observation as technique to collect the data. The instruments were made by the researcher to guide in doing observation. In this observation, the researcher did not belong to the classroom members involved in teaching and learning process. The researcher used non-participant observation to obtain data.

During the process of observation, the researcher collected the data using video recording and field-notes. The data deals with teacher's action means the researcher focused on what teacher have done

from the beginning to the last class about incorporating higher order thinking skills, in terms of utterances. Meanwhile, the data related to students' speaking performance were collected as the evidence of incorporation higher order thinking skills. The data were collected randomly from 20 students, because the teacher only asked several students while performing speaking. Therefore, the researcher write the result based on the real as it did and the observation conducted until the data saturated.

Related to the data collection technique administered, field note was the instrument that used as means of obtaining the data. Field notes were administered to reveal the information on how the teacher incorporates higher order thinking skills in teaching speaking. The activities which are in accordance with higher order thinking skills observed and those wrote in field note. The teaching and learning process was the screen to view and observe. Field note also served as the instrument in gathering data and also helped in clarifying the research data. Then the result of the field notes presented descriptively.

2.4 Data Analysis

The whole data in this study evaluated using data analysis techniques based on Miles, Huberman, and Saldana (2014) frameworks following information gathered during the observation process. The framework consists of four points to analyze the qualitative data. They are data collection, data condensation, data display, conclusion drawing and verification.

The initial step of analyzing data is data collection. In this study, the data were gathered from field-notes and video recorder. The data were teacher's action and students' speaking performance in terms of utterances. Related to utterances data, the researcher transcribe it based on the real situation. The following analysis process is data condensation. The data condensation gathered based on the definition of higher order thinking in the previous chapter. In this stage, data reduction related to the process of choosing, concentrating or focusing, simplifying, abstracting and transforming the data collection. In this research, in descriptive and reflecting materials, the researcher converted and simplified the raw field notes

Data display means the activities done in this organizing, compressing, and assembling information. The researcher organized, compressed, and assembled the information in this stage as data display. Then, she established and combined the whole data that were related to first and second research question with the theoretical literature described in chapter 2 at this point. The researcher categorized HOTS (Higher order thinking skills) based on categorization of HOTS proposed by Saifer (2018). The categorization of higher order thinking skills consist of two categories. They are critical thinking skills and creative thinking skills.

The final stage were drawing conclusion and verification follow after the procedures were completed. The verification verified by the analyst proceed and verified by the subjects. Then, after

set of the processes has been done, finally conclusion that consisting of conclusion drawing; verified by the analyst proceed and verification; and verified by the subjects.

3. RESULTS

3.1 Teacher’s way in incorporating higher order thinking skills into teaching academic speaking

Based on the analysis of teacher’s actions during five meeting, it was found that the teacher incorporated higher order thinking skills in teaching speaking in every meeting. Based on the result of observation, the teacher who participant in this study did different stages of teaching speaking. Also, questioning was the only one way to incorporate higher order thinking skills. They were described as this table below:

Table 3.1 Incorporating Higher Order Thinking Skills in Teaching Academic Speaking

Meetin g	Learning Stages	Incorporated HOTS	Strategies
1	Warm-up Introduction/engage Presentation/explanati on Practice Assessment/ evaluation	Parse and transfer skill Critical thinking skills	Questionin g
2	Warm-up Explanatio n Practice Discussion	Infer skill and imagine skills Critical and creative thinking skills	Questionin g
3	Warm-up Interview Discussio n Debate	Critical thinking skill Creative thinking skill	Questionin g
4	Warm-up Vocabular y Discussion Presentatio n	Critical thinking skill Creative thinking skill	Questionin g

5	Warm-up Presentation Discussion 1 Discussion 2 Discussion 3 Interview friends Debate	Critical thinking skill Critical thinking skill Critical thinking skill Creative thinking skill	Questioning
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Based on table, the results show that the teacher incorporated higher order thinking skills in each meeting. The teacher incorporated critical and creative thinking skills which part of higher order thinking skills in each meeting. In the first meeting the teacher only incorporated critical thinking skills. The second meeting, the teacher incorporated creative thinking skills. The third until fifth meeting, the teacher incorporated critical and creative thinking skills. Questioning was the strategy used by the teacher in incorporating higher order thinking skills.

3.2 Evidence of Higher order thinking skills in Students’ Academic Speaking Performance

The result of observation, teacher incorporated higher order thinking skills in each stage. Higher order thinking skills based on Saifer (2018) has two categories. They are critical thinking and creative thinking skills. The teacher incorporated HOTS used questioning strategies. As the result, students’ thinking skills, in particular students’ higher order thinking skill was improved. It can see from students’ reaction in answering teacher’s answer. Students delivered the answer orally. Thus, the students’ speaking performance would be the main data as the evidence of incorporation higher order thinking skills.

Table 3.2 Students’ Speaking Performance of Critical Thinking Skills in Warm-Up

Meeting	Part of speaking performance	HOTS
2	T: What do you think about these pictures? Give me your opinion. S1: I think rural area is small settlement, where there are natural vegetation and open spaces. There is a low population, also the primary source of income of people are agriculture and animal husbandry.	Elicit students’ critical thinking skills (inferring skill) Critical thinking skills (inferring skill)

S2: In urban area a settlement where the population is very high and has futures of built environment. There is high pollution caused due to large scale industrialization and means of transportation like cars, buses and motorcycles. So that's why it can increasing health problems in the people living in that area.	Critical thinking skills (inferring skill)
T: amazing answer. Is there any other answer?	
S3: From this picture I can conclude that living in rural area is unhealthy and make some people scared to live there. Because of those risk of death is high.	Critical thinking skills (inferring skill)
T: thank you. Good answer. Who want to answer again?	
S4: Rural Americans are at greater risk of death than urban Americans, I agree with that opinion. Regarding the reality that people live in rural have their higher rates of cigarette smoking which might induce high blood pressure, and obesity. Moreover, rural residents have less leisure-time physical activity than their urban counterparts. They also have higher rates of poverty, which mean the urban inhabitant are less access to healthcare, and less likely to have health insurance.	Critical thinking skills (inferring skill)

Based on the table above, it shows that teacher incorporated higher order thinking skills using question in warm-up stage. In that interaction, the teacher asked students' opinion about the picture which consists of issue. She focused on incorporating critical thinking skills, in particular inferring skill. Students' answer showed their opinion about the issue. The question was not book question which means they can find it from sources. But, the question in this interaction elicit students to answer based on their own thinking. Giving conclusion and opinion were aims in the teacher's question. It could engage students to use their thinking skill in answering the question. As the result, students unconsciously their inferential skill was improved through answering the question. In addition, students answer the question confidently.

Incorporating higher order thinking skills did by the teacher not only in warm-up stage, but also did in presentation stage. In the presentation stage, the teacher gave instruction first, before asking students to do presentation. Based on the result of observation, the teacher gave several questions as the content of students' presentation. Then, students had to present based on the questions.

Therefore, in this stage the teacher also used questioning strategy as the way in incorporating higher order thinking skills. It showed in the following interaction:

Table 3.3 Students’ Speaking Performance of Critical Thinking Skills in Presentation

Meeting	Utterances	HOTS
4	<p>T: please prepare a presentation based on these questions. After preparing your presentation, please make group of 4 students to present in front of them.</p> <p>Why do you think people like some jobs and hate others?</p> <p>What are the top 5 and bottom 5 jobs in your country?</p> <p>What are the most important things about a job? Is it money? People? The hours you work?</p> <p>What for you is the perfect job?</p> <p>S: people like and hate some job because usually people only choose a good job with good salary and hate hard work with less salary. In my opinion five top job are government employees, official, office manager, entrepreneur, administration official. Then 5 bottom are teacher, tailor, carpenter, seller, and mechanic. Of course money is the most important things. The best job for me is entrepreneur.</p> <p>S: Coming from that question, there are two answers coming up from my mind. The first is salary. People are like getting higher salary although they do not really like doing the jobs or even the environment and people where they work. The second is passion. Everyone has their own passion. Regarding that reason, some people decide to seek</p> <hr/> <p>jobs which is appropriate with their passion. Simply, they feel more comfortable doing the work.</p> <p>5 tops jobs are civil servant, banking employee, entrepreneur, and teacher</p>	<p>Instruction</p> <p>Elicit students’ critical thinking skills (interpret skill)</p> <p>Transfer skill</p> <p>Parse skill</p> <p>Delivering speaking which incorporation critical thinking in terms of interpret, transfer and parse skills.</p> <p>Delivering speaking which incorporation critical thinking in terms of interpret, transfer and parse skills.</p>

5 Bottoms are trader, farmer, servant,
barber and tailor

People is the important thing in job.
Because when we feel comfort with the
people or environment in the place we
work, we won't perform in having a
work.

Civil servant is the appropriate job to
bring happiness for me. Because, being
a civil servant just like having an easy
jobs. You're just an employee who
comes to work every day and receives a
salary. It doesn't matter if your sense of
entrepreneurship is low. Civil servants
prefer easy
money instead of hard work and innovation.

Based on the interaction in presentation stage, it shows that the teacher elicit students to improve their critical thinking. In this section, the teacher gave four questions. Each question had different aim. The first question was "Why do you think people like some jobs and hate others?" This question asked students to give interpretation about something. Then students answered based on their interpretation. As the result, students improved their interpretation skill which is part of critical thinking skill. The following question was "What are the top 5 and bottom 5 jobs in your country?" In this question transfer skill incorporated by the teacher. It because the teacher wanted students to compare something their own context with the other context. Their answer also showed that they compared the job other country with their country. For the two last questions had the same aim that improving students parse skill. Parse skill is part of critical thinking skill. The questions asked students critically to examine something in complex. Then, the students perform their answer based on their analysis. They did not realized that they improved their critical thinking, in particular parse skill.

Evidence of Creative Thinking Skills in Students' Speaking Performance

Creative thinking skills are category of higher order thinking skills. Based on the result of observation, creative thinking occurred only in several activities. Teacher incorporated creative thinking skill used similar strategy that was questioning. In this section the researcher focused on showing students' speaking performance deal with evidence of incorporation creative thinking skills from the whole activities that recorded and written in the field-notes. From fifth meeting, the teacher incorporated creative thinking skills in second meeting until fifth meeting. Further, students' speaking performance of incorporation critical thinking found in that meeting.

In the second meeting, the discussion did after doing presentation. The teacher asked students to discuss about a case in group. The case is many people become dissatisfied with fast-paced lifestyle in big city and they do not like their job. Downshifting to a cheaper and calmer rural life or a different working life at home as the solution. The teacher allowed students to find other solutions

in their discussion about that case. Students worked in small groups. In the end of discussion, students allow to ask questions each other. The result analysis of students speaking performance shows below:

Table 3.4 Students’ Speaking Performance of Creative Thinking Skills in Discussion

Meeting	Utterances	HOTS
2	<p>S: London today is known as one of the fast-paced cities, where people live there is forced to be faster all the time in order to continue the fast paced life. There are countless job opportunities and activities to do. Although, the big city has more job opportunities, there are also more people competing for a single job. This can make the job search frustrating. Another problem is the living cost is higher in big cities. <u>That’s why, moving to rural area can be a one of the solution. There are some positive sides about living in rural area, first, the cost of living is stunningly low. Almost everything is less expensive than in the city. Second, the air is cleaner because there is less traffic and fewer factories and other facilities that emit pollution.</u> For these and other reasons, people who live in rural area have better mental health on the average than do urban people.</p> <p>S: I think in this era, many people already think that life in the city makes them saturated. Life in the city make the busier. No time to rest, gather with family or vacation. <u>For now, prefer to live in the village is the best choice, because they need feel calm in life, no pollution and others.</u> In my opinion, it all depends on them, both of the solution are good. Because UK people who can feel the peace of life, if indeed living in the city or in the village makes <u>them comfortable, That’s good.</u></p>	<p>Problem solving Inductive thinking skill</p> <p>Problem solving</p>

Based on the result above, the students show their performance in terms of creative thinking skill. The students delivered speaking based teacher’s questions which incorporated creative thinking skill. Problem solving and inductive which part of creative thinking skill included in their speaking as the evidence of incorporation HOTS. The first students delivered idea in discussion session which represent inductive skill and problem skill. The following student performed problem solving only in

short. Here as the evidence that students unconsciously improve their thinking skill which creative thinking skill from the instruction of the teacher.

Incorporation higher order thinking in teaching speaking by the teacher also occurred in debate. This activity happened in the fifth meeting of observation. As the previous way, in this activity, the teacher incorporated HOTS using questioning strategy. She provided several statements which debatable. The final statement for debate is “Eating fast food is OK if you don’t eat it every day.” In this task students have the opportunity to compare their own beliefs with the statement. The teacher divided students into groups and told one to argue 'for' and the other to argue 'against' each of the statements or they could just defend their own opinions. The result analysis of students speaking performance shows below:

Table 3.5 Students’ Speaking Performance of Creative Thinking Skills in Debate

Meeting	Utterances	HOTS
5	Group of Pro - Overview: This group believes that eating fast food is OK if you do not it every day. Fast food can be beneficial to some extent. It is inexpensive, convenient, and tastes good.	Interpretation skill
	Group of Against Overview: This group does not believe that eating fast food is OK if you do not it every day. Fast food brings numerous disadvantages such as excess in calories, abundant sugar and fat ingredients, and long-term unhealthy lifestyle.	Interpretation skill
	Group of Pro - Speaker 1: First benefits of rarely eating fast food is inexpensive reasoning. Fast food offers reasonable prices for those who want to save their budgeting for another purpose. This is why rarely eating fast food is acceptable.	Reframe skill
	Group of Against - Speaker 1: Firstly, vivid disadvantage is the excess in calories. Eating fast food, even rarely, may disrupt the body’s daily calories consumption. Stored calories will subsequently result as potential obesity.	Reframe skill
	Group of Pro - Speaker 2: Second benefits of rarely eating fast food is convenience. Mostly, fast food restaurant provides convenience and comfy eating environment.	Reframe skill

Group of Against - Speaker 2 :

Secondly, another radiant disadvantage is the abundant sugar and fat. Reframe skill
Many

fast-food meals have added artificial sugar that result in trans-fat production. No amount of trans fat is good or healthy.

Group of Pro - Speaker 3:

Third benefit is that fast food offers tasty meals. There are numerous Reframe skill
menus

and options to be ordered, ranged from Mexican, American, and even European meals.

Group of Against - Speaker 3 :

Lastly, ultimate disadvantage of rarely eating fast food is a long-term Reframe skill
unhealthy lifestyle. There is numerous illness as the consequences of this lifestyle such as obesity, high blood pressure, heart diseases, and stroke.

Group of Pro - Conclusion:

To conclude, considering the reasonable price, comfortable eating Generate skill
environment, and various delightful menus, eating fast food is ok if you do not eat it every day.

Group of Against - Conclusion:

To sum up, reflecting the dangerous disadvantages such as excess in Generate skill
calories, sugar and fat ingredients, and degenerative illness, eating fast food is not
okay, even if you do not it every day

Based on the analysis debate activity above, the students showed their creative thinking skill. The creative thinking in the interaction above are interpret, inductive, reframe and generate skill. The first and second speaker shows their ideas as the evidence of interpret skill. During giving pro idea and against, they showed reframe skill. It was proved through their speaking performance in solving the problem and strengthen their opinion. In the last session of debate, they concluded which means generate skill. They take conclusion from their point of view and based on their thinking skill.

As it was explained above, there are two categories of higher order thinking skills. The first is critical thinking skills. The second is creative thinking skills. The researcher found utterances in line with part of creative thinking skill and critical thinking as the evidence of incorporation higher order thinking skills when certain strategy used by the teacher. In summing up, the incorporation higher order thinking skills in teaching speaking give positive impact to students' speaking performance. The students are not only get the knowledge from the teacher, but also they have a chance to improve their thinking skills. It can be proven from students' speaking performance in this study.

4. DISCUSSION

Teacher's way in incorporating higher order thinking skills into teaching academic speaking

The teacher's primary expectations in the teaching and learning process are to transfer their knowledge and competences to the learners. Not only transfer knowledge, but the teachers also have responsibility to improve students' way of thinking. It deals with teaching thinking skills to students. Therefore teacher has responsible to find the appropriate way in teaching specific language skills with incorporating thinking skills. In present study, the researcher found the teacher of undergraduate students incorporated higher order thinking skills in teaching academic speaking.

Based on the findings in previous chapter, the researcher found that teacher only used questioning as the way to incorporate higher order thinking skills in teaching academic speaking. The finding shows exactly different from research interpretation which incorporating HOTS can use several ways. Such as graphic organizer, concept to concept and scaffolding. However, only questioning was used by the teacher frequently from first day until last day of observation. Using questioning strategy in incorporating HOTS is similar to the study done by Sibing, Xu (2014). In the research was done by Sibing, Xu (2014), the finding shows students can talk longer and produce longer sentences. In addition, in speaking proficiency, students show an effective thinking process become more active and produce sentence naturally and coherently (Xu, 2014). In the present study, the teacher used questioning in academic activity which are warm-up activity, presentation, discussion and debate.

In the first observation, the teacher only incorporated critical thinking skill in teaching speaking. It shows in the whole activities during observation. Then, in the following day until the last day of observation, the teacher incorporated critical and creative thinking skills. Critical and creative thinking skills are the categories of higher order thinking skills based on Saifer (2018). Critical thinking skills refers to parse, evaluate, infer, shifting perspective and transfer skills. Meanwhile, creative thinking skills represent imagine, interpret, inductive, reframe and generate skill. The researcher in present study observed whether those skills were incorporated by the teacher in teaching speaking.

Based on the findings in the chapter 4, critical thinking skills were incorporated by the teacher in several activities. In the first meeting, the teacher incorporated critical thinking in terms parse skill which students gave question to analyze some picture. According to Saifer (2018), parse skill is the process of analyzing critically to examine something in complex. Incorporating parse skill was also done by the teacher in the third meeting. In that day the teacher asked students to interview in pair using questions which are provided. This activity in line with study done by Chinedu, et al (2015), to facilitate the development of parsing, teacher can ask incisive questions. The questions have to be responsive to students, more complex, focused and clearly stated the questions. The incisive questions are not only formed by teacher to students, but those can also be created by students to students.

The teacher also incorporated critical thinking which focused on evaluate. In this activity, the teacher asked students to evaluate their friends' presentation based on the rubric that given by the teacher. This activity is similar with the previous study was done by Heong et al (2012), the common way to help students' evaluating skill is evaluate each other work as well as their own. In this activity, students have chance to develop evaluation criteria and imply them objectively and fairly. Therefore, the students can achieve objective of learning and perform as good as in the evaluation criteria.

Infer skill is also part of critical thinking based on Saifer (2018) which define the ability to gain insights from partial or non-explicit information or from pieces of information indirectly related or where the relationship is obscure. In this study found that the teacher incorporated infer during activity in teaching speaking. It shows from the second meeting when the teacher asked students to watch a video about the topic that day. Then, they had to give conclusion about the video. The present study similar to the previous by Wilson (2016), in reading activity in terms of watching video or reading text, there are some higher levels of thinking shown by students; those are taking notes of main ideas, identifying main ideas, and summarizing key points.

In the second meeting of observation, the teacher asked students to do role play. Half of them pretend to be musician and the rest as music fan. They got case from the teacher about download song for free. They had to give opinion based on their role. From this activity, the students had chance to share idea or opinion from other perspective. This in line with the definition of shift perspective by Saifer (2018) that shift perspective is the ability to understand others' point of view and to visualize objects or spaces from various angles. According to Butterworth et al (2016), shift perspective can incorporate in process of teaching and learning, for instance the teachers give an article to students and they have to criticize from other point of view orally.

The last part of critical thinking which incorporated by the teacher in this study is transfer skill. Based on the findings in this study, transfer skill incorporated in the second meeting when the teacher warmed-up students using questioning (Thomas and Thorne, 2009). In that activity, the teacher asked students to take the case to their context. It same as the meaning of transfer skill that take an idea from one context and apply it successfully in different contexts (Saifer, 2018). Therefore, from the activity which focused on incorporating transfer skill such giving case, learners are able to use what they have taught (Anderson & Krathwohl, 2001).

The following category of higher order thinking is creative thinking skill. Based on the findings in this study, critical thinking incorporated by the teacher during four days of observation. In the third meeting, the teacher asked students to imagine that they will held an event. They had to arrange everything, include decided musician who will be invited in that event. Students shows their speaking ability in this discussion. This activity is linear with the creative thinking skills by means imagine have purpose to sharpen and expand students' imaginative thinking (Danah,et.al, 2017). Through inventing something, it is able to facilitate students' imaginative thinking skills from basic

to advance (Danah, et al., 2017). Hence, the inventions by means imaginative skill could practice or improve particular abilities speaking in academic context.

In previous chapter, the researcher also found interpret skill that the teacher incorporated in teaching speaking. According to Saifer (2018), interpret is part of creative thinking skill. Interpret skill is a process of taking something into one's own. The findings of this study which belong to interpret skill is when the second meeting, teacher teach how the way compare adjectives in speaking. After explaining about comparative adjective, teacher asks students to say if there is a difference between their lifestyle at the moment and what they would prefer. This can be explored more freely with higher levels but keep it quite brief.

Creative thinking skills are also examine students in solving problem (Saifer, 2018). It shows in the findings that the teacher incorporated this skill in teaching academic speaking. It exactly occurred in the second meeting, case study that given by the teacher, it can engage students inductive and reframe skill which belong to creative thinking skills, in particular students' problem solving skills also engaged (Chinedu et al., 2015).

All in all, the higher order thinking skill proposed by Saifer (2018) which consists of critical thinking and creative thinking skills are incorporated by the teacher in teaching speaking. In the present study, the teacher incorporated HOTS in students of undergraduate in English department. The teacher frequently using questioning then students answer orally in presentation, discussion or debate.

Evidence of Higher order thinking skills in Students' Academic Speaking Performance

As the explanation above about the significant of higher order thinking skills for students to learn, this study shows the practice of incorporation higher order thinking skills and the evidence of it in the students' speaking performance. The practice was quite run well when it showed in their performance. Based on the findings of observation, critical thinking and creative thinking skill which categories of higher order thinking skills (2018) were showed in students' speaking performance.

The researcher clarified the evidence of students' performance based on the explanation of higher order thinking skills by Saifer (2018) which are critical and creative thinking skills. The teacher incorporated infer skill as part of critical thinking, in order to engage students capability to speak actively and confidently (Wilson, 2016). The result in the previous chapter, evidence of critical thinking skills in students speaking performance, showed from their utterances in the warm-up stage of second meeting. The students performed confidently about their ideas related to the picture which consists of issue. They stated their ideas confidently and critically during discussion activity.

The follow on ability of higher order thinking skills after the critical thinking is creative thinking skills (Saifer, 2018). Creative thinking skills represent ability to imagine, interpret/synthesize, theorize, reframe and generate (Saifer, 2018). Creative thinking skills is an essential and common

life skill used every day (Hidayat, et al, 2018). In terms of academic speaking, in this study creative thinking occurred in presentation, discussion and debate. Based on the finding in the previous chapter, students performed discussion and debate which incorporated creative thinking skills.

Creative thinking skills presented in the findings of this study were interpret, reframe, and generate skills. Interpret skill means taking something and rendering it into one's exclusive interpretation (Saifer, 2018). Reframe and generate skill in line with problem solving. When solutions are needed to resolve an immediate problem, generating ideas spontaneously occurs. In university context, the ability to generate ideas can apply by asking students about complex idea which gets them to think

deeply (Chinedu et al., 2015). In the findings of this study, students delivered creative thinking skills when they delivered their idea in solving the problem and taking conclusion. It showed in debate activity. In this activity, students begin with draw on their mind about the topic. (Chinedu et al., 2015). During giving pro idea and against, they showed reframe skill. It was proved through their speaking performance in solving the problem and strengthen their opinion. In the last session of debate, they concluded which means generate skill. They take conclusion from their point of view and based on their thinking skill.

5. CONCLUSION

This study has already addressed all the questions put in chapter 1 of the initial study. Based on the findings, analysis and discussion know the similarities and differences of this study with the past studies. The main focus on this study is higher order thinking skills and teaching academic speaking. The researcher investigated the teacher's way in incorporating higher order thinking skills in teaching speaking skill.

The first conclusion is that questioning is frequently used by the teacher to incorporate higher order thinking skills in teaching academic speaking. The higher-thinking skills that incorporated by the teacher are critical thinking skills and creative thinking skills. In critical thinking skill, the teacher incorporated parses, evaluate, infer, shifting perspective and transfer skill. Then, in creative thinking skills are imagine, interpret, inductive, reframe and generating skill. Those categories of higher order thinking skills are incorporated by the teacher in teaching academic speaking. The academic speaking that teacher taught deal with academic activities. Such as presentation, discussion and debate.

The second conclusion deals with students' speaking performance as the evidence of incorporation higher order thinking skills. The researcher conducted five observations in five meetings to gather the data. The data deals with students' performance showed that almost all students were delivering their performance confidently and actively through questions from teacher which incorporated higher order thinking skills. They showed critical and creative thinking skills in their speaking performance.

The evidence related to students' speaking performance gathered by the researcher from academic activities. Such as presentation, discussion and debate.

All in all, it can be concluded that higher order thinking occurred in teaching speaking of undergraduate students. Not only the teachers can incorporate them, but the also the students can employ higher order thinking skills in their speaking performance. The incorporation of higher order thinking skills by the teacher give positive impact to students' speaking performance. The students are questioned in terms of employing higher order thinking skills in delivering speaking. The evidences prove that students are able to do so.

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