



# Bloom's Taxonomy Revision-Oriented Integrated With Learning Speaking Activities To Improve Critical And Creative Thinking Capabilities And Speaking Competence

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**Abstract:** Speaking competence is one of the basic language competences that has important role for effective communication. This study attempts to find out whether the implementation of Bloom's taxonomy could enhance the students' speaking competence at Biftu Gimbi Secondary School. The population of this study was the students from the 11 grade of students at Secondary School Biftu Gimbi, Ethiopia. The sample of this study was the students in grade 11 nine students as experimental group and nine students as control group. Through the quantitative method, the writer analysed the data by means of t-test. The result shows that there was a significant difference in the students' speaking competence taught by implementing Problem Based Learning integrated with Bloom's taxonomy. The students' mean of post-test's control group score was **65.9%**. Then in post-test experimental group, the mean score of the students was **77.78%**. In other words, problem based learning speaking activities integrated with Bloom's taxonomy has successfully enhanced speaking competence of the experimental group students. Therefore, Bloom's taxonomy integrated with Problem Based Learning speaking activities may be one of the appropriate teaching methods to improve students' English-speaking proficiency as it gives a chance for students to relate themselves with real-life issues that require real-life solutions.

**Keywords:** speaking, teaching speaking, Bloom's taxonomy, Speaking Competence, Speaking Activities, Speaking Strategies.

## I. INTRODUCTION

In language learning, speaking competence in languages plays a significant role in effective communication, social interactions, education, career advancement, cultural understanding, personal development, and travel experiences. It is a valuable skill that opens doors to various opportunities and enriches our lives in numerous ways. Speaking is more than to form grammatically correct sentences; it rather covers broad areas of mechanics, functions, pragmatics and social interaction (Yaşar Kurum, 2016). He stated that any foreign language teaching methodology used in the classroom throughout the history has always sought to develop ways to improve the competency of learners in these areas.

Teaching speaking competence has come into major focus in many language programs, and it is undeniable that teaching strategies can influence learning outcomes. According to (Dziura, 2017) teaching speaking competence is implicitly stated in core and basic competence of Secondary School syllabus. In the speaking competence core, speaking activities that support students in developing their metacognitive understanding of foreign language speaking as well as their ability to organize and assess their own learning should be provided.

The researcher discovered that certain students have poor speaking abilities in 2023 at Secondary School Biftu Gimbi in Ethiopia based on the findings of a preliminary investigation there. Some factors contributed to the students' difficulty speaking English. First, because the teachers spent so much time teaching reading and organization in text book activities, the students required more opportunities to practice speaking competence. Several Speaking classes failed owing to ineffective textbooks. To illustrate, the material's activities were limited and uninteresting. As a result, the speaking competence was inadequately taught or was not taught at all. In fact, speaking as a competence needs extended practices of knowledge and skills. The students cannot speak well without integrating their transforming their English knowledge, skills, and attitude into oral practice. Fluency, correctness, and complexity are key components of the holistic model and make up speech quality as the desired outcome of teaching and learning, but they are insufficient to acquire speaking competence (Dziura, 2017).

Second, students were not interested in speaking practice in classroom interaction because some English teachers still used traditional text book based speaking activities in teaching speaking. For example, the teachers still promoted the students learning English through teachers' preparation of the speaking activities, the teachers gave the students some examples of conversation and asked the students to practice the conversation in pair in front of the class which is found in text book; and the teachers asked students to memorize the structure of the conversation. Moreover, the teacher's implementation of learning activities lacks creativity and critical thinking and variety, which makes instruction more teacher-centered (Adijaya, M. A., et al., 2023). Without acknowledging the role that students play in the learning process, the approach being used is still traditional. As a result, this activity was ineffective since students would quickly forget the vocabulary and structure if they learnt and practiced various themes.

Related to the problems mentioned above, an applicable teaching activity of teaching speaking English is required to be implemented by English teachers in connection to teaching speaking competence English at secondary school. Teachers can adopt many instructional strategy integrated with Bloom's taxonomy in teaching speaking competence and there are many highly effective strategies in teaching and learning process that have been invented in recent years problem based learning such as role play, picture description, and Communicative Language Teaching (Richard and Rodgers, 2001). In this research, one of the methods that is considered effective in teaching English speaking activities is authentic and real life based activities which integrated with Blooms taxonomy speaking activities to develop speaking competence.

The ability of teachers to foster an engaging and enjoyable learning environment and to inspire students to participate actively in the learning process are essential to helping students develop their procedural knowledge (Adijaya, M. A., et al., 2023). It's because fostering an enjoyable learning environment will influence students' motivation and interest in subsequent lessons. Student learning results will be favorably impacted by high motivation and interest in the learning process (Berutu and Tambunan, 2018).

Teachers should provide holistic speaking activities integrated with Bloom's taxonomy learning objectives to help students reflect on their language knowledge, skills, and experience and practice. According to Adam (2018), the most observable and significant pedagogical component is learning materials. In line with this, Damayantiet al. (2018, referenced in Rampeng, 2021) said that learning materials undeniably improve the quality of language instruction, assist teachers in carrying out their responsibilities, and lead students to a better comprehension of learning. It is a teaching speaking activities that students learn by solving problems and reflecting on their experiences. This instructional strategy is well-suited to helping students become active learners because it situates learning speaking competence in real world problems and makes students responsible for their learning.

There are studies that are connected to this research. These results might be valuable for this study. The first one was conducted by Rampeng et al,(2021). This study conclude that speaking materials based on active learning activities and integrated with revised Bloom's taxonomy are relevant, effective, and suitable for their students' speaking competence. This study was classroom action research. The result of this research shows that the implementation of Bloom's taxonomy integrated with speaking activities could improve the students' speaking competence in using the language aspects. The second study was conducted by Butarbutar et al.,(2022). The results reveal that participants' English-speaking performance improves, as seen by a rise in scores between pre-test and post-test across five speaking components: grammar, vocabulary, fluency, pronunciation, and comprehension.

The reason above has motivated the researcher to implement these activities to overcome problems students faced in learning speaking at Biftu Gimbi Secondary School, Ethiopia. Based on such an assumption, the researcher is interested in doing an experimental study using Problem Based speaking Learning activities integrated with Bloom's Taxonomy for the 11th grade students of Biftu Gimbi Secondary School, Ethiopia.

## I. RESEARCH METHODOLOGY

The methodology section outline the plan and method that how the study is conducted. This includes Universe of the study, sample of the study, Data and Sources of Data, study's variables and analytical framework. The details are as follows;

### 3.1 Population and Sample

The study used pre-specified test for the selection of sample. This study's population consisted of 196 grade 11 students from Gimbi Secondary School, who were then subjected to an equality test against all grade 11 students using One Way-ANOVA in the SPSS 26.0 application for Windows. The population of the study was the total object composed of comparable elements (Asbari et al., 2019; Kokoç and Kara, 2021). At the same time, the research samples were determined using a systematic sampling technique and 18 students who participated in this study. The sample in this study was 18 students, with characteristics presented in Table 1.

**Table 1: Sample selection table**

	Level of the score									Total population			score
	High			Medium			Lower			Male	Female	Total	
Total population	Male	Female	Total	Male	Female	Total	Male	Female	Total				Male
	17	8	25	74	60	134	11	19	30	102	87	189	20-17, high
Sample selection	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	9	9	18	16-13, medium
	3	3	6	3	3	6	3	3	6	9	9	18	12-8, lower

The study comprised of nine control group students who learned with textbook based speaking activities and nine experimental group students who actively traded with PBSA strategy are selected on the bases of results of speaking test results. And Cambridge University PET speaking test is taken as base year for sample selection.

### 3.2 Data and Sources of Data

The researcher used a pre-test and a post-test and questionnaires to get the data. He administered the pre-test during the first meeting in order to ascertain the students' basic proficiency in speaking. The following three months saw the administration of the treatment.

#### 3.2.1 Test

Tests were used to find out the data about the students' proficiency in speaking. Test has given to students in both experiment group and control group. The usefulness of Bloom's Taxonomy on students' speaking competence learning activities, knowledge capacities, skills, attitude, and learning outcomes was examined using test methodologies (Adijaya, M. A., et al., (2023). It used to measure students' speaking ability or components: grammar, vocabulary, fluency, pronunciations and comprehension before and after the implementation of the problem based speaking activities with Bloom's taxonomy method. For this reason, there were two types of tests used as research instruments, they were pre-test and post-test. Pre-test was to identify students' initial ability before experimental teaching. In this study, the writer used an oral test to assess the students' speaking performance.

**Table 2: The Grid of speaking components Instrument**

Speaking components	Assessment scales		
	Range "1 point"	Appropriate 3 "point"	Flexibility "5 point"
<b>Grammar</b>	shows a good degree of control of a range of simple and some complex grammatical forms.	Maintains control of a wide range of grammatical forms.	Maintains control of a wide range of grammatical forms and uses them with flexibility.
<b>Vocabulary</b>	"Uses a limited range of appropriate vocabulary to give and exchange views on familiar and unfamiliar topics.	"Uses a range of appropriate vocabulary with flexibility to give and exchange views on unfamiliar and abstract topics.	"Uses a wide range of appropriate vocabulary with flexibility to give and exchange views on unfamiliar and abstract topics."
<b>Fluency</b>	Produces extended stretches of language with very little hesitation.  Contributions are relevant and there is a clear organisation of ideas.  Uses a range of cohesive devices and discourse markers	Produces extended stretches of language with ease and with very little hesitation.  Contributions are relevant, coherent and varied.  Uses a wide range of cohesive devices and discourse markers	produces extended stretches of language with flexibility and ease and very little hesitation.  Contributions are relevant, coherent, varied and detailed.  Makes full and effective use of a wide range of cohesive devices and discourse markers
<b>Pronunciation</b>	"Is intelligible. Intonation is appropriate. Sentence and word stress is accurately placed. Individual sounds are articulated clearly"	"Intelligible: a contribution which can generally be understood by a non-EFL/ESOL specialist, even if the speaker has a strong or unfamiliar accent."	"Phonological features are used effectively to convey and enhance meaning."
<b>Comprehensions</b>	"Initiates and responds appropriately, linking contributions to those of other speakers. Maintains and develops the interaction and negotiates towards an outcome."	"Interacts with ease, linking contributions to those of other speakers. Widens the scope of the interaction and negotiates towards an outcome."	"interacts with ease by skilfully interweaving his/her contributions into the conversation". "it fully and effectively"

**Note:** According to Cambridge. org. "Range" is about 'variety' the students may not be giving extra information with the words (that is kind of 'flexibility' more) but just being able to use synonyms for style and accuracy.

And 'limited' must mean that the student repeated themselves; that they continually used the most common adjectives, nouns, phrases, etc.

While 'wide' would be interpreted that the student has shown they do not need to repeat the same word too often, and that they don't rely heavily on the most common and most generic words and phrases.

Besides, Cambridge.org do not give guidelines on Bands 0, 2 or 4 in the documentation. Instead they say the following:

#### Range

We looked at the cambridge.org definition of range already, and here in vocabulary marking schema we can see that the quality of RANGE demarcates each individual band:

Band 1 = "limited range"

Band 3 = "range"

Band 5 = "wide range"

Basically for a C2 performance the students may need to use a medium to large vocabulary set.

0 = "Performance below Band 1"

2 = "Performance shares features of Bands 1 and 3."

4 = "Performance shares features of Bands 3 and 5."

The speaking component criteria test had been tested for the validity and reliability of the instrument. To test the validity of the speaking competence, the Cambridge University speaking assessment criteria were used. The results obtained from calculating each instrument item with the Cambridge University criteria were basically for a C2 performance using a medium to large vocabulary set. 0 = "Performance below Band 1"; 2 = "Performance shares features of Bands 1 and 3"; 4 = "Performance shares features of Bands 3 and 5". The acquisition of the Cambridge criteria value indicated valid criteria. It was used to test the content validity of the speaking components of the test instrument. The results obtained from calculations using the speaking competence assessment least score were **3**. The acquisition of speaking competence scores indicated very good validity criteria. To test the reliability of the speaking competence test with multiple data points, the Alpha-Corona formula was used. The results obtained from these calculations were **0.91** and met the criteria of high reliability

### 3.2 Questionnaires

#### 3.2.2 Blooms Taxonomy Questionnaire

To find out the effects of PBSA with BT teaching instruction on secondary school students' Blooms Taxonomy to students' critical thinking and creative thinking skills to develop speaking competence, a 20 items questionnaire was distributed to all subjects before and after the intervention.

### 3.3 Theoretical framework

Variables of the study contains dependent and independent variable. The study used pre-specified method for the selection of variables. The study used the Problem based speaking with Blooms Taxonomy are as independent variable. From the results gained from problem based speaking activities which are critical thinking and creative thinking skills and speaking competence are dependent variables. The changes of students; critical thinking and creative thinking skills and speaking competently abilities are calculated.

#### 3.3.1 Bloom's Taxonomy Learning Objectives

A proper teaching technique for speaking class can lead students to develop their speaking competence with Bloom's taxonomy as it relates to their daily lives. It is very important to improve their speaking competence. An instructional approach where students learn Bloom's taxonomy to develop critical thinking skills and creative thinking skills to create new ideas to solve the problem created in the speaking activities. The tasks are real problems, and the solutions take the form of social and contextual factors. In order to solve problems and develop the techniques they will use to solve them; and the students rely on their present understanding of the

issue at hand (Fahmi et al., 2021). Furthermore, the problem-based speaking activities integrated with Bloom's taxonomy speaking activities proved to improve students' critical and creative thinking skills better than the text book-based activities. Finally, students get the ability to convey thoughts and distribute information in a clear and objective manner.

Moreover, critical Thinking and Bloom's Taxonomy go hand in hand. Students are guided through a cognitive process of critical information or knowledge analysis via Bloom's taxonomy. A competency-based educational model is built on Bloom's taxonomy. Bloom's taxonomy essentially focuses on on-going learning for developing skills through theoretical information as well as tasks and activities that support practical abilities (Yuh and Coutinho, 2017). Bloom's Taxonomy of Educational Objectives (Bloom et al. 1979) established categories for cognitive (thinking and problem-solving skills), affective (attitudes), and psychomotor domains. Besides, Bloom's taxonomy progresses from simple to more complicated, from easy to difficult, from concrete to abstract, and as a requirement to each other (Tarman and Kuran 2015).

Students find it easier when they face and solve the problem which is not far different from their real lives. Furthermore, Harun et. al (2012, p. 6) stated that Bloom's taxonomy focuses more on developing students as independent learners compared to traditional lectures which encourage students to be fed by lecturers and it improves the teaching and learning process. Students are required to be creative and independent in the learning process. It offers opportunity to provide continuous stimulation for them to engage in the task.

Each competence derives from one learning objective, and the speaking activities contain one or more action verbs related to each level of taxonomy. For the apply and analysis level of taxonomy, action verbs like describe, illustrate, and outline in the oral way are arguments using communication vocabulary to explain the point of view of concepts. To understand, apply, and analyse levels of taxonomy, identify, organize, and classify contents using logical, critical, and analytical thinking to find problems and propose solutions in a critical and creative manner.

As mentioned above, Bloom's Taxonomy contains three overlapping domains: the cognitive, psychomotor, and affective, also known as knowledge, skills, and attitudes (Pickard, 2007). (1) Cognitive domain (learning objectives directed to thinking capacity); (2) affective domain (feelings, emotions, value systems, and heart attitudes); and (3) psychomotor domains (motor abilities or skeletal muscle use (Khairani, 2019; cited on Gunawan, 2016; Richard M. et al., 2004). Furthermore, Sudirtha, I. G., et al (2022) explain that the effectiveness of developing revised Bloom's taxonomy-oriented learning activities to improve students' Meta cognitive abilities. Bloom's Taxonomy is an approach in which the students to develop metacognitive skills and to expect students in use reasoning abilities to solve complex problem. Because students are at the Centre of their learning, they are actively involved in the process. Parwata, I. G. A. L., et al., (2023) say that learning practice strengthens students' metacognitive skills and allows them to reflect on what they know about themselves while remaining honest and confident in their knowledge. Learning activities are also grouped by learning objectives to assist students in improving their learning results.

Muhayimana, T., et al. (2022), on the other hand, address a gap in the current literature on high-stakes and accountability-driven assessment practices in language educational policies involving the use of English as a classroom language and curriculum reforms in postcolonial contexts. Adijaya, M. A., et al., (2023) stated that the effectiveness of developing Bloom's Taxonomy revision oriented learning activities to procedural knowledge capabilities and learning outcomes. They explained that "the interaction between students and students, teachers and students, especially students, requires innovations in learning so that learning qualifies good learning. Because learning activities are created to be more creative and diverse, the use of Bloom's Taxonomy Revision in the teaching and learning process has a significant impact on enhancing students' knowledge, skills, and attitudes.

In consequence, the usefulness of constructing speaking activities integrated with Bloom's Taxonomy revision-oriented learning activities for grade 11 secondary school learners' procedural knowledge capacities, skills, and learning outcomes.

Bloom's Taxonomy is the foundation of the theoretical framework. Bloom's Taxonomy is the framework for classifying educational goals and objectives to promote HOTS, which includes six cognitive levels: knowledge, comprehension, applications, evaluation, and creation. The use of Bloom's Taxonomy in problem based speaking activities offers a means of refining and structuring students learning experience, ensuring that they are designed to challenge the student's critical thinking abilities, requiring them to analyse, evaluate, and create in order to construct new knowledge or ideas.

**Table 3: The Instrument for the Assessment of Learning Outcomes under Bloom's Taxonomy (modified from Aryawan et al., 2023)**

Basic Competency	Indicators	Cognitive Level	Question Type	Items Number
The students identifies the key characteristics of needed for an organism to survives in particular ecosystem	Explain weather the animals survives in a given ecosystem	C5	3	3
Presents experimental results on the relationship between organism and ecosystem	Determine the effect of ecosystem and organism	C3	3	3
	Determine the use of ecosystem in an activity	C3	2	
Explains the advantages of individual diversity of characteristics in everyday life in the ecosystem	Analysis the differences in characteristics of the organism in their living place	C4	3	3
	Discuss the benefits of the diversity of individual characteristics in everyday life	C2	2	
Understands pictures and shapes in three dimensions.	Describe the images that make up three-dimensional pictures.	C2	3	3
	Explain the features of a three-dimensional image.	C3	1	
Analyse the characters in the imaginary text.	Remember the characters from the narrative.	C1	3	3
	describing the personalities of all the characters in a story	C2	1	
creates a narrative picture	Create a story picture	C6	3	3

### 3.4 Technique of Data Analysis

The data analysis process was started by the researcher. A speaking evaluation rubric with five components grammar, vocabulary, fluency, pronunciation, and comprehension was utilized by the researcher to analyse the outcomes of the students' speaking proficiency (Brown, 2004).

The data from the experimental and control groups were then calculated and compared using the statistical method of the t-test to examine the hypothesis. As previously stated, the level of significance for this social research was  $\alpha=0.05$ . So, the criteria of measuring the hypothesis were if  $t\text{-test} < t\text{-table}$ ,  $H_a$  accepted. On the contrary, if  $t\text{ test} > t\text{-table}$ ,  $H_o$  accepted. ( $\text{Sigma}/P > 0.05$ ),  $H_o$  accepted; ( $\text{sigma}/P < 0.05$ ),  $H_a$  accepted.

Furthermore, in answering the second research question. The scoring system of questionnaires carried out based on the Likert scale. The data processed using the percentage formula as recommended by Sudjana (2009,) cited on Fahmi et al., (2021).

**Table 4. Aspects of creative and critical thinking in learning and teaching speaking competence vis a vis the Bloom's Taxonomy of Cognitive Learning**

Ability set	Components	Bloom's Level of Cognitive learning
Interpreting facts (D'angelo, 1970; Norling (2009)	Use content of knowledge to better understand new concept	Knowledge
Applying generalisations (D'angelo, 1970)	Use content of knowledge to better understand new encounters	Comprehension
Valuing differences (Chambers, & Gregory, 2006)	Feel enthusiastic with the experiences of others who stay in other places or different time	Application
Understanding important aspects of life (Chambers, & Gregory, 2006);	Ask questions to get information that answer or solve problems search for the meaning of life	Analysis
Finding alternatives	Creatively work on alternative direction of life, and assess the implications associated with it	Synthesis
Differentiating between moral and immoral conducts (D'Angelo, 1970).	Recognize errors by seeking for ideas on moral and social issues. Give attention to certain aspects of life, or ignore specific phenomena Think of the aspects of life that deserve acknowledgement or admiration	Evaluation

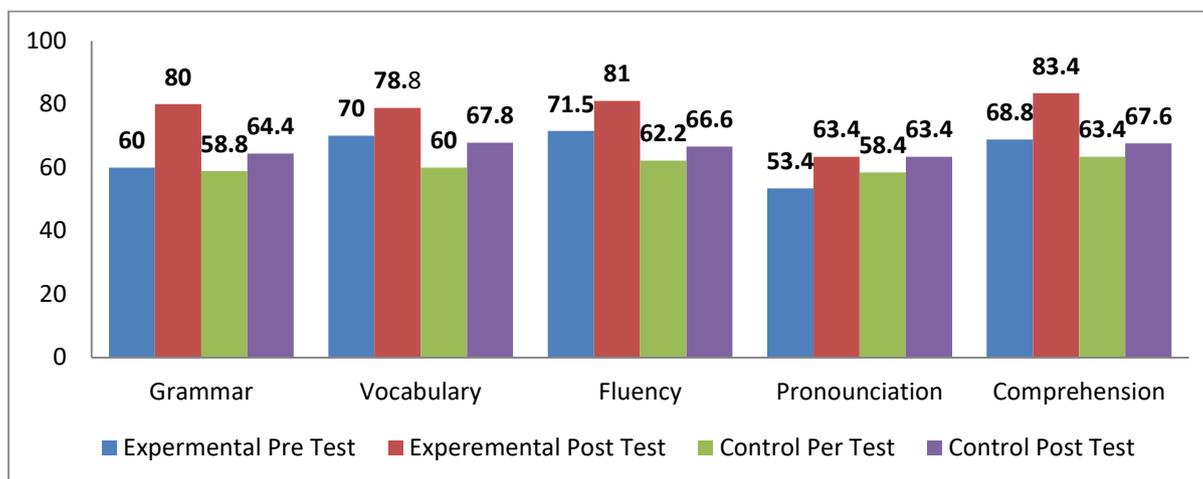
Source: Shukran Abdul Rahman & Nor Faridah Abdul Manaf, (2017)

### 3.4.Descriptive Statistics

Descriptive Statics has been used to find the maximum, minimum, standard deviation, mean and normally distribution of the data of all the variables of the study

#### 4.1 Results of Descriptive Statics of Study Variables

The pre-test result was the first test needed to determine students' speaking competence before PBL integrated with Bloom's taxonomy was implemented. The researcher conducted the speaking test in order to know the students' initial ability. There were five speaking criteria that the writer assessed during the individual speaking test.

**Figure1: The summary of Pre Test and Post Test Results****Figure 1: The summary of Pre Test and Post Test Results**

In the research conducted by Fahmi et al. (2021), it was also reported that the students in problem-based learning have successfully enhanced the speaking skills of the II-IPA I students, but the components of speaking competence have not improved at all. According to the above chart, the post-test of grammar was 60% to 80%, and their average of vocabulary was 70% to 78.8%. Fluency was 71.5% to 81%, pronunciation was 53.4% out of 63.4%, and comprehension was 68.8% to 83.4%. Students were more focused on features of pronunciation, grammar, vocabulary, accuracy, fluency, and comprehension during speaking activities (Hanan & Budiarti, 2019; Sumarsono et al., 2020).

As mentioned above, in terms of student post-test scores, the students felt some advantages of Bloom's taxonomy in learning speaking, and Bloom's taxonomy could motivate them to increase their speaking competence. Among the five speaking component criteria, all of them increased to some extent. Students' speaking competence has improved as Bloom's taxonomy has given them stimulation and encouraged them to present their ideas.

To sum up, the above chart describes that the results of the pre-test and the post-test in the experimental class were used to show the improvement in the students' scores. In the pre-test, the students are asked by the researcher to make a problem-based speaking competence test, i.e., a group discussion, before the intervention begins. Following the teaching, the students were instructed to create new ideas for group discussion to determine whether the intervention was successful in improving the gain scores between the pre-test and post-test in the experimental class, as shown below: According to the chart, there was a significant improvement from pre-test to post-test following an intervention. It means that after participating in problem-solving activities, students improve their critical and creative thinking skills and speaking competence. The improvement can be measured by comparing the pre-experimental minimum score of 63.67% to the post-experimental maximum score of 77.78%, where in the control group, 59.6% in the pre-test changed to 65.9% in the post-control group.

## 2. Questionnaire

A questionnaire was also distributed to students in the experimental group and control group. This instrument was to know students' responses to the implementation of Bloom's Taxonomy in the teaching of speaking competence. The author used a closed-ended Likert scale questionnaire where the answers were prepared for the questions. The questionnaire consists of eighteen questions related to the implementation of Bloom's taxonomy learning objectives method. The students have responded to each on a four-point scale: always, often, sometimes, and hardly ever. The choices represented the degree of agreement of each respondent.

In assessing the data, the researcher applied two methods namely test and questionnaire. The students were answered the questionnaire that containing 18 questions in order to see the response of students toward Bloom's Taxonomy. And it used statistic model that was proposed by Sudjana (2009) for their answer of each question. The following questions are elaborated below. What is the advantage of using Bloom's taxonomy in speaking activities?

**Table 5: students' questionnaires****Preliminary of Students' Questionnaires**

No	Items	STA	Agree	Dis agree	SDA	Never
1	Integrating Bloom's taxonomy with speaking is an interesting teaching approach.	60	25	10	5	
2	In learning Bloom's taxonomy method, I do not feel afraid to speak in front of the class.	55	35	5	5	
3	Teachers need to appreciate me when I perform thinking and speaking in the class.	70	20	5	5	
4						
5	I really enjoy learning speaking competence with Bloom's taxonomy method.	60	25	10	5	
6	I feel confident practicing speaking English when learning with Bloom's taxonomy method.	65	25	5	5	
7	I feel satisfied with my speaking proficiency after learning Bloom's taxonomy method.	55	35	5	5	
8	I do not like it if Bloom's taxonomy method is often applied to learning to speak English.	15	10	55	25	
9	Learning to speak with Bloom's taxonomy is not important for me to develop my speaking proficiency.	5	5	35	55	
10	I think that the integration of Bloom's taxonomy with speaking activities is an appropriate method to improve my speaking proficiency.	60	25	10	5	
11	When learning speaking competence with Bloom's taxonomy method, I can find the relationship between the critical thinking and creative thinking and their use in daily life.	65	25	10		
12	Learning speaking competence by using Bloom's taxonomy model is very boring.	25	65	5	5	
13	Bloom's taxonomy method allows me to gain a better understanding of subject material.	60	30	5	5	
14	When I learn speaking competence integrated with Bloom's taxonomy, it helps me promote my critical thinking and creative thinking skills.	5	5	25	65	
15	Learning speaking competence with Bloom's taxonomy method makes me confused.	65	25	5	5	
16	I like learning speaking with Bloom's taxonomy method.	75	20	5		
17	The speaking activities integrated with Bloom's taxonomy help me generate creative and innovative solutions to complex problems.	70	25	5		
18	The speaking activities integrated with Bloom's taxonomy help me to propose alternative solutions through gathering, planning, and creating new knowledge.	65	25	5	5	

The questionnaire on students' perceptions on Bloom's Taxonomy related to speaking competence was intended to investigate whether grade 11 students at Biftu Gimbi Secondary School had a tendency toward high-order thinking skills or lower-order thinking skills to develop speaking competence (the Bloom's Taxonomy parameter).

In the first questionnaire, it was a surprise that 60% of students strongly agreed that integrating Bloom's taxonomy with speaking activities is an interesting teaching approach, 25% of students had a similar opinion, and the rest of the students stated disagree and strongly disagree that integrating Bloom's taxonomy with speaking activities is an interesting instructional strategy.

The second questionnaire was about how the students felt after learning to speak, supported by Bloom's taxonomy. It can be seen that 55% of students were no longer afraid to speak in front of the class. 35% of students also felt the same. The rest of the students, which make up 10% of the total, were still afraid to perform their speeches in front of the class.

The third questionnaire was about the speaking activities given by the teacher to the students. The teacher appreciated them when they performed thinking and speaking in the class. The results show that almost all students desire to learn to speak; 70% of them stated that they strongly agree, and 20% of students agree that the teacher needs to use such types of activities. Another 10% of students disagree that these types of activities have no effect on their performance, thinking, or speaking.

In the fourth questionnaire, 60% of students strongly agreed that Bloom's taxonomy method is a fun teaching method. They said that they really enjoy learning speaking competence with Bloom's taxonomy method. 25% of students thought it was just fun, and 10% of them strongly disagreed. The distributed questionnaire also wanted to gain information about students' confidence.

The fifteen questionnaires showed 65% of students had better confidence after learning speaking activities integrated with Bloom's taxonomy. It was more than half students. 25% of students said they feel confident practicing speaking English when learning with Bloom's taxonomy method. They had a similar experience, and only 10% of students disagreed or strongly disagreed about that.

In the sixth questionnaire, it was a surprise that 75% of students feel unsatisfied about their score which means that their speaking ability needed improving. It was only 20% of them who felt satisfaction and the rest of students felt satisfied.

In the seventh questionnaire, 55% of students strongly agreed that Bloom's taxonomy integrated with speaking activities would be integrated with speaking tasks in learning to speak English, and 25% of them agree and supported the above ideas. And the rest of them did not seem to really like for Bloom's taxonomy to be used often as a teaching tool for speaking competence.

Most students thought that speaking English was important, as seen in the eighth questionnaire. 55% of students strongly disagreed that Bloom's taxonomy method is applied to learning to speak English, and 35% of students agree. Only 10% of students disagree and strongly disagree that speaking English with Bloom's taxonomy was not important.

Related to the appropriateness of Bloom's taxonomy method, in the ninth questionnaire, 55% of students strongly agreed that Bloom's taxonomy was an appropriate method for speaking competence, and another 35% of students agreed that Bloom's taxonomy with speaking activities was an appropriate instruction to improve their speaking proficiency. 5% of the students disagree that Bloom's taxonomy is appropriate to be implemented in speaking, and 5% of them strongly disagree that Bloom's taxonomy is the appropriate method.

Bloom's taxonomy integrated with speaking activities Instruction was very contextual, as shown in the tenth questionnaire; 60% of students strongly agree that they could find the relation between the activities and their use in daily life, and 25% of students agree with the same experience. 10% of students disagreed with the statement, and the rest (5%) strongly disagreed.

Beside Bloom's taxonomy-speaking activities, integration was a fun and appropriate method; it was also very entertaining for most students. It can be seen in the eleventh questionnaire that 65% of students strongly disagreed that Bloom's taxonomy was a boring one, and another 25% disagreed with the idea. Only 10% of students had the opposite idea, and it could be for some reason.

In the twelfth questionnaire, only 25% of students strongly agreed that Bloom's taxonomy method allows them to gain a better understanding of subject material, and 65% of students agree about the idea that they had a better understanding of the speaking English if they learn with Bloom's taxonomy. Only 5% disagreed, and another 5% strongly disagreed with the idea.

Bloom's taxonomy is one of the methods that help students promote their critical thinking and creative thinking skills. It was proved by looking at the answers to the thirteenth questionnaire, which showed 60% of students strongly agreed that when they learn speaking competence integrated with Bloom's taxonomy, it helps them promote their critical thinking and creative thinking skills, and 30% of them agree with the idea. The rest of the students did not have the same idea; 5% of them disagreed, and another 5% strongly disagreed.

The fourteenth questionnaire proved clearly that 65% of students strongly disagreed that learning speaking competence with Bloom's taxonomy method makes them confused, and 25% of them disagreed with the ideas. Only 10% of the students thought that it was a confusing method.

The fifteenth questionnaire was about students' opinions about whether they like learning to speak using Bloom's taxonomy. The data shows that 75% of the students strongly agree learning speaking with Bloom's taxonomy method, and another 20% agreed and had the same opinion. Only 5% of students did not like Bloom's taxonomy method.

The last of the eighteen questionnaires was about students' opinions about whether they like learning speaking activities integrated with Bloom's taxonomy. The data shows that 75% strongly agree that the speaking activities integrated with Bloom's taxonomy help them generate creative and innovative solutions to complex problems. According to them, speaking activities integrated with Bloom's taxonomy always help students propose alternative solutions through gathering, planning, and creating new knowledge, and another 15% of them agreed with the above opinion that they often assist the learner. The rest of the 10% disagree that it helps them.

**Table 6: LOT and HOT of Bloom's taxonomy Sample Statistics in Relation to Critical Thinking and Creativity**

Blooms' taxonomy	Mean	Number	Std. deviation
LOT	13.78	18	2.86
HOT	30.68	18	4.25

As illustrated in Table 2, the students' questionnaires' results revealed that HOTS has a direct relationship to critical thinking and creativity, which is  $M = 30$ , while LOTS has a less direct relationship to critical thinking, which is  $M = 13.78$ . The particular ways in which the experimental group students apply their minds to solving problems are called thinking skills. This issue posits that developing thinking skills is important for second language learning. On the one hand, according to numerous scholars, second language acquisition research and teaching have recognized that learners bear primary responsibility for learning a second language, while teachers serve as facilitators. The primary responsibility that learners take in learning a second language requires them not to simply remember and recall language in its abstract form, but to engage in critical and creative analysis and evaluation of the material at hand in order to internalize the language (Li, D., and Zhang, L. 2022). The biggest advantage of this teaching technique is the development of critical thinking and higher-level thinking skills such as creation, analysis, and evaluation. In pair or group work, personal qualities are developed through discussion and expressing opinions.

Student reflections about their speaking competence process through the questionnaire indicated that most grade 11 students at Biftu Gimbi Secondary School in this study were uncritical and uncreative speakers. This

finding supported many field researchers' claims that many "untrained" speakers relied on rote memory speaking activity (Burns, 1998). The causes for their inclination towards drills, structure manipulation, or pattern practice (a direct approach), may be their past speaking experiences, their level of confidence in the target language, and their teachers' traditions of teaching and testing speaking competence. On the whole, this text book based speaking activities intends to raise learners' consciousness of language structure, and teachers are leaders who are responsible for the students' learning process, but they also need to teach their students '**how to think critically**' rather than '**what to think**'. Individuals with critical thinking skills are able to express their emotions and feelings in front of audiences in an accurate, complete, clear, and effective manner. Students' critical thinking about speaking competence might also influence their creativity in speaking competence.

## CONCLUSION AND RECOMMENDATION

### Conclusion

According to the findings of the research, teaching speaking using Bloom's Taxonomy has helped to the improvement of students' speaking competency. Students learn to talk effectively and directly to the team, as well as convey their ideas clearly, by incorporating Bloom's taxonomy into problem-based duties.

The adoption of Bloom's taxonomy in speaking classes aids students in developing their speaking proficiency in terms of pronunciation, vocabulary, accuracy, fluency, and grammar, which answers the primary research question. However, not every student can considerably raise their competency.

It can be seen from the previous chapter that the mean post-test score of students who were taught using Bloom's taxonomy was integrated with speaking activities. The improvement can be measured by comparing the pre-experimental minimum score of **63.67%** to the post-experimental maximum score of **77.78%**, where in the control group, **59.6%** in the pre-test changed to **65.9%** in the post-control group. These values indicate that the average experimental group results are higher than the control group.

In addition, Bloom's Revised Taxonomy, integrated with speaking activities, was developed effectively to enhance the critical and creative thinking capabilities and speaking competence of grade 11 secondary school students. This is because Bloom's Taxonomy revision-oriented learning speaking activities have the following advantages: can improve students' activeness in learning; can create students' learning experiences; enable students to go through, experience, or perform as well as be able to relate their skills and knowledge with new ideas and views on learning speaking activities; produce deliberate changes in knowledge, skills, and attitude values; increase students' interest and motivation in learning; provide opportunities for students to develop critical thinking and creative; can increase students' independence in learning through problem solving speaking activities that are following existing procedures; can allow for social interaction that makes learning more enjoyable.

### Recommendation

The effectiveness of teaching speaking is determined not merely by the lesson program, but also by how the teacher delivers the lesson and employs appropriate teaching techniques to make the class more entertaining, fascinating, and interactive.

Implementing Bloom's Taxonomy revision integrated with speaking activities can encourage learners to participate actively and become centers for learning speaking competence. The researcher recommends that teachers' create and implement speaking activities based on Bloom's Revised Taxonomy in lower and higher classes to help students develop their critical thinking and creative thinking capabilities and speaking competence. Moreover, this research is expected to be used as input for future researchers to do similar research or to elaborate on different research approaches.

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