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**Adapting Bloom's Taxonomy for Designing Grammar Activities to Teach English Tenses at IUH**

Tran Anh Tuan<sup>1</sup> and Nguyen Vu Manh Hoai<sup>2</sup>

<sup>1,2</sup>Faculty of Foreign Language, Industrial University of Ho Chi Minh City, Viet Nam

Corresponding Author: Tran Anh Tuan      E-mail: [trananhtuan.edu468@gmail.com](mailto:trananhtuan.edu468@gmail.com)

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**ABSTRACT**

*This experimental study aimed to investigate the application of Bloom's taxonomy in teaching grammar, specifically English tenses, at IUH. The researchers aim to enhance the teaching and learning process of English tenses by incorporating higher-order thinking skills into the activities. Two groups of students, DHAV18A (n=42) and DHAV18B (n=45) were involved in the study. After teaching the English tenses chapter in the grammar course, the views of the students were surveyed regarding the self-study section and in-class activities that utilized a high level of Bloom's taxonomy. Additionally, students' scores on a test were analyzed, revealing that 90% of students were able to answer basic questions correctly, while 80% were able to answer difficult questions that required the application and creation levels of Bloom's taxonomy. The study also outlines the specific steps taken to adapt the taxonomy, including the identification of specific verbs and cognitive processes related to teaching English tenses. The adapted taxonomy is then used to design a set of grammar activities for each tense. Finally, the researchers conducted a pilot study to evaluate the effectiveness of the activities in terms of student engagement and learning outcomes. The findings suggest that the adapted taxonomy can be successfully applied in designing grammar activities for teaching English tenses, leading to improved student engagement and learning outcomes. The study concludes with recommendations for further research and implications for language teaching.*

**1. Introduction**

Teaching English tenses can be a challenging task for language educators, as it requires a comprehensive understanding of grammar concepts and effective pedagogical strategies. Furthermore, many students struggle with grasping the complexities of English tenses, making it necessary to utilize innovative and captivating teaching methods (Faradella, 2022).

Bloom's Taxonomy is a widely recognized framework for designing instructional activities that promote higher-order thinking skills in students. Originally developed by Benjamin Bloom in the 1950s, this taxonomy categorizes educational objectives into six levels: remembering, understanding, applying,

analyzing, evaluating, and creating. These levels provide a structure for educators to develop activities and assessments that allow students to engage in cognitive processes at progressively higher levels of complexity (Ratih, (2020).

In this study, we aim to adapt Bloom's Taxonomy for designing grammar activities specifically catered to teaching English tenses at IUH (International University of Hanoi). By incorporating this framework into our teaching methodologies, we anticipate enhancing students' understanding and retention of English tenses, as well as fostering their critical thinking and problem-solving skills (Sadighi, 2018).

This study will explore the various levels of Bloom's Taxonomy and their implications for designing grammar activities. We will also evaluate the effectiveness of these activities in terms of improving students' mastery of English tenses and their overall learning experience. Additionally, we will assess students' perceptions of the adapted activities and gather feedback to inform future implementation and refinement.

By employing Bloom's Taxonomy as a guide, we aim to create a more engaging and interactive learning environment that encourages students to actively participate in their own learning (Tomlinson, 2016). We believe that by incorporating higher-order thinking skills into grammar instruction, students will not only develop a solid understanding of English tenses but also enhance their ability to communicate effectively in the language.

This study holds the potential to contribute to the field of language education by providing educators with practical strategies for designing grammar activities that promote critical thinking and problem-solving skills. Through the successful adaptation of Bloom's Taxonomy, English language educators at IUH and beyond can enhance their instructional practices and ultimately improve students' proficiency in English tenses.

## **2. Literature review**

### ***2.1 General of Bloom Taxonomy***

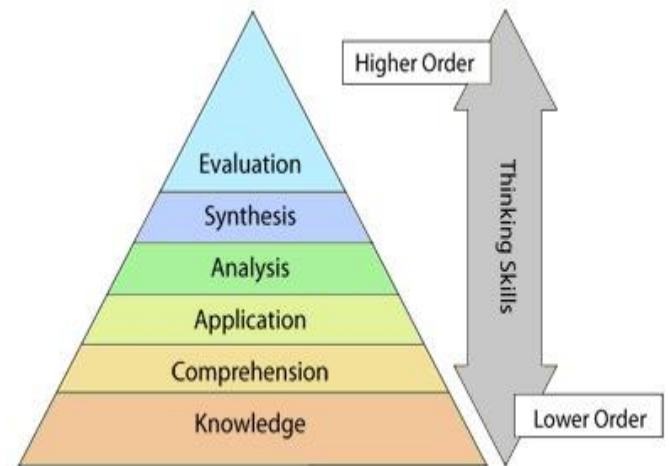
Bloom's taxonomy was created to establish a shared vocabulary among teachers for discussing and exchanging methods of teaching and assessing learning. It is commonly used to assess learning at various levels of cognitive thinking (Atmowardoyo, 2021). The taxonomy consists of different levels, ranging from higher-order to lower-order thinking. Educators aim to promote higher-order thinking in their students by starting with lower-level cognitive skills. This can be done by incorporating Bloom's taxonomy into broader educational objectives or guidelines. Key phrases can be used to prompt students to demonstrate these skills during assessments (Dehibi, 2022).

### ***2.2. Applications of the Taxonomy***

Taxonomies are created to help categorize and organize things based on their underlying structure. For example, languages can be classified into groups like Romantic or Germanic based on their grammar and origin. Bloom's taxonomy is a framework that teachers can use to develop their course learning outcomes

Gordani, 2010). There are several reasons why teachers would find it beneficial to use Bloom's taxonomy. First, it helps teachers understand the educational process and how cognitive development progresses from lower-level skills to higher-order thinking. This understanding can then be used to prioritize material and plan lessons effectively. Secondly, Bloom's taxonomy provides a structure for breaking down standards and curriculum requirements into manageable parts, which can be used to guide lesson planning. Thirdly, different levels of Bloom's taxonomy require different instructional delivery methods and assessment techniques. By using the taxonomy as a checklist, teachers can ensure that all levels of a subject are assessed appropriately and align assessment methods with the

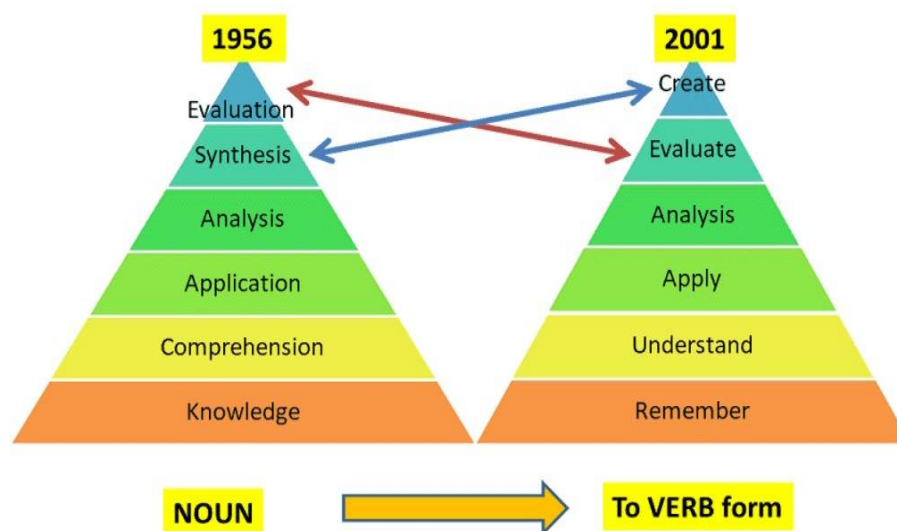
corresponding lessons and teaching methods. This helps to maintain consistency and identify areas where students may be struggling (Köksal, 2018).



Source. Adapted from Charlotte Ruhl at *Simply Psychology*:

### 2.3. Revised Bloom's taxonomy

A team of educators, including David Krathwohl and Lorin Anderson, modified Bloom's taxonomy in 2001 to offer more specific learning objectives (Netolicka, 2017). They replaced nouns with action verbs in the revised version and also reorganized the highest levels. The comparison between the original and revised taxonomy is illustrated below:



Source. Adapted from, Ekramul Hoque at Educare Centre

### **2.3.1. Remember**

In simpler terms, remembering is the ability to recall information from memory. This includes memorizing facts, dates, events, and other important details (Ratih, 2020). For example, students might memorize and explain vocabulary words. The cognitive processes involved in this stage are recognizing and locating information in long-term memory, as well as recalling and retrieving that information when needed.

### **2.3.2. Understand**

When students are able to effectively explain ideas or concepts, it demonstrates their understanding. This can include things like clarifying a metaphor or answering questions about a text they have read. The processes involved in understanding include interpreting information, giving examples, categorizing information, summarizing, making inferences, comparing ideas or objects, and explaining cause and effect relationships (Refat, 2020).

### **2.3.3. Apply**

At this stage, students are able to use information or ideas in different situations and contexts. For instance, they can apply a specific grammar tense to talk about various situations. The cognitive processes involved in this stage include executing a known procedure for a familiar task, like finding the square root of a number and implementing a procedure for an unfamiliar task, such as using Newton's Second Law in a new scenario (Refat, 2020).

### **2.3.4. Analyze**

In this stage, students have the ability to analyze information by breaking it down into smaller parts and then making connections between those parts. This can be seen when learners compare and contrast the characteristics of two different objects. The processes involved in this stage include differentiating, which involves determining important information from unimportant information, organizing, which involves understanding how different elements fit together; and attributing, which involves identifying the underlying bias, values, or intent in presented material. An example of attributing would be identifying the author's point of view in an essay (Sadighi, 2018).

### **2.3.5. Evaluate**

Evaluating is the act of evaluating and expressing one's own opinion. Learners are expected to use their knowledge and skills to examine a situation, justify their position, or criticize others' opinions. This can be done by participating in class discussions and defending their views (Tomlinson, 2016).

Evaluating can be further split into two parts: checking and critiquing. Checking involves identifying inconsistencies or errors in a process or product. For example, a student might determine if their friend's answer about the school rules is accurate based on the actual conditions of the school.

Critiquing, on the other hand, involves identifying inconsistencies between a product and external criteria. For instance, a student might judge which of the two methods is the most effective for solving a problem.

### **2.3.6. Create**

The creation stage is the most challenging part of the learning process and represents the highest level in Bloom's Taxonomy. It involves students demonstrating their understanding by producing something new or original. At this stage, students may rewrite a story in a different setting or create a presentation using the vocabulary and concepts they have learned. The cognitive processes associated with creation include generating alternative hypotheses, planning a procedure for completing a task, and producing a new product. Examples of these processes include devising multiple solutions for a social problem and creating an outline for an article (Chan, 2020).

### **2.4 Adapting Bloom's Taxonomy for Grammar Teaching**

Bloom's Taxonomy is a widely recognized framework for categorizing educational objectives and assessing learning outcomes. It was originally developed by Benjamin Bloom in 1956 and has since been adapted and expanded upon by other researchers (Faradella, 2022). This taxonomy classifies learning objectives into six levels: remembering, understanding, applying, analyzing, evaluating, and creating. The taxonomy has predominantly been used in the context of general education and subject-specific areas, but there has been a growing interest in applying it to the teaching of grammar (Hidayat, 2022).

Previous studies have shown that the traditional approach to teaching grammar, which focuses on rote memorization of rules and sentence patterns, does not lead to meaningful language learning. Many researchers argue that grammar instruction should be integrated into communicative language teaching, where learners are engaged in meaningful and authentic language use. This shift in emphasis from explicit grammar instruction to implicit learning has led to a need for a new framework to guide grammar teaching (Likitrattanaporn, 2017).

Adapting Bloom's Taxonomy for grammar teaching can provide a valuable framework for designing grammar activities that promote higher-order thinking skills. By categorizing grammar objectives into the different levels of the taxonomy, teachers can create activities that go beyond simple rule memorization and encourage students to actively engage with language in a meaningful way. For example, at the remembering level, students can practice recalling and identifying grammar rules, while at the understanding level, they can explain the rules in their own words or give examples of how they are used in context (Philippines, 2020). At the applying level, students can apply the grammar rules they have learned to create their own sentences or paragraphs (2020). This involves not only understanding the rules but also being able to use them appropriately in different contexts. Analyzing and evaluating levels involve higher-order thinking skills, where students can analyze and evaluate sentences or texts for grammatical accuracy or effectiveness. Finally, at the creating level, students can engage in creative writing activities where they have to apply grammar rules to create original and cohesive pieces of writing (Rosell-Aguilar, 2017).

Several studies have explored the application of Bloom's Taxonomy to grammar teaching. For example, a study by Setyarini (2018) examined the effectiveness of using Bloom's Taxonomy in grammar teaching

with Chinese EFL learners. The study found that using the taxonomy as a guide for activity design led to improved language proficiency and increased learner engagement.

Similarly, Sağkol (2022) conducted a study on the application of Bloom's Taxonomy to grammar instruction in a college English classroom in China. The results showed that using the taxonomy as a framework for designing grammar activities promoted higher-order thinking skills and enhanced students' understanding and retention of grammar rules.

Overall, the adaptation of Bloom's Taxonomy for grammar teaching has the potential to transform the traditional approach to grammar instruction. By promoting higher-order thinking skills and meaningful language use, this framework can lead to more effective and engaging grammar instruction. However, further research is needed to explore the specific strategies and techniques that can be used to implement Bloom's Taxonomy in grammar teaching, as well as its impact on long-term language learning outcomes.

### ***2.5 Applying Bloom's Taxonomy to Teach English Tenses***

Previous studies have explored the application of Bloom's Taxonomy in various subject areas, including English language learning. In the context of teaching English tenses, Bloom's Taxonomy can provide a framework for designing lessons that go beyond rote memorization and help students develop a deeper understanding of the tenses.

One study by Xu (2011) examined the use of Bloom's Taxonomy in teaching English tenses to undergraduate students. The study found that by incorporating higher-level thinking skills such as analysis and evaluation, students were able to engage more deeply with the tenses and demonstrate a better understanding of how and when to use them.

Similarly, another study by Atmowardoyo (2021) used Bloom's Taxonomy as a guide for designing lesson plans on English tenses for middle school students. The study found that by structuring the lessons around different levels of thinking, students were able to grasp the concept of tenses more easily and apply them in their writing and speaking.

These findings are consistent with the theory behind Bloom's Taxonomy, which suggests that higher order thinking skills such as analysis, evaluation, and synthesis are crucial for deepening understanding and promoting meaningful learning.

Another study by Dehibi (2022) explored the effects of incorporating Bloom's Taxonomy in teaching English tenses to adult learners. The study found that by using higher-level thinking skills, such as applying and analyzing, students were able to make connections between different tenses and understand the nuances of their usage.

In addition to these studies, there have been several other studies that have examined the application of Bloom's Taxonomy in various aspects of English language learning. For example, one study by Gordani (2010) explored the use of Bloom's Taxonomy in teaching vocabulary, while another study by Köksal (2018) applied Bloom's Taxonomy in teaching reading comprehension.

In general, these studies demonstrate the potential of Bloom's Taxonomy as a framework for teaching English tenses and other aspects of language learning. By incorporating higher-order thinking skills, educators can help students develop a deeper understanding of the tenses and how to use them effectively in their communication. Furthermore, using Bloom's Taxonomy can promote meaningful and active learning, as students are required to engage with the material at a deeper level.

### ***2.6 Benefits of Using Bloom's Taxonomy for Grammar Instruction***

Several previous studies have examined the benefits of using Bloom's Taxonomy for grammar instruction and found that it can enhance students' learning outcomes in this area. For example, a study by Netolicka (2017) found that incorporating Bloom's Taxonomy into grammar instruction resulted in improved understanding and application of grammatical concepts among elementary school students. The study also found that students' ability to analyze and evaluate grammar rules and their own writing improved after being exposed to instruction using Bloom's Taxonomy.

Another study by Ratih (2020) explored the effects of using Bloom's Taxonomy for grammar instruction in a high school setting. The study found that students who were taught using Bloom's Taxonomy achieved higher scores on grammar assessments compared to a control group who received traditional grammar instruction. The researchers also reported that the students who were taught using Bloom's Taxonomy showed more engagement and enthusiasm towards grammar, indicating that the use of this framework can enhance students' motivation and interest in learning grammar.

In addition to improving students' learning outcomes, using Bloom's Taxonomy for grammar instruction can also promote higher-order thinking skills. By guiding students to analyze, evaluate, and create grammar concepts, educators can help them develop critical thinking skills and apply their knowledge in meaningful ways. This is supported by a study by Refat (2020), which found that incorporating Bloom's Taxonomy into grammar instruction resulted in improved problem-solving and creative thinking skills among students.

Furthermore, using Bloom's Taxonomy for grammar instruction can help students see the relevance and practical application of grammar in real-life contexts. A study by Sadighi (2018) explored the effects of using Bloom's Taxonomy to teach grammar in an ESL (English as a Second Language) classroom. The study found that incorporating activities that required students to analyze and evaluate authentic grammar examples helped them understand the practical importance of grammar in communication. This led to increased motivation and engagement in grammar lessons.

### ***2.7 Criticisms and Limitations of Bloom's Taxonomy in Grammar Instruction***

Despite the benefits of using Bloom's Taxonomy in grammar instruction, there are also criticisms and limitations associated with its use. One criticism is that the taxonomy may not adequately address the unique challenges and complexities of teaching grammar. Grammar instruction often involves rote memorization of rules and patterns, which may not fit neatly into the cognitive levels of Bloom's Taxonomy. For example, the lowest level of the taxonomy, knowledge, emphasizes the recall of facts and concepts, which may not capture the nuances and subtleties of grammar rules (Tomlinson, 2016).

Another criticism is that the taxonomy may lead to a narrow focus on discrete grammar rules rather than a more holistic approach to language learning. This can create a fragmented understanding of grammar, where students focus on isolated skills rather than understanding how grammar functions as a system (Chan, 2020).

Additionally, the taxonomy may not adequately address the affective aspects of grammar instruction. Language learning is a complex process that involves not only cognitive skills but also motivation, attitude, and cultural factors. The taxonomy's focus on cognitive skills may overlook the importance of these affective factors in grammar instruction (Gordani, 2010).

Furthermore, the taxonomy may not be applicable to all learners and contexts. Different learners have different learning styles and preferences, and what works for one learner may not work for another. The taxonomy's rigid categorization of learning objectives may not allow for the flexibility needed to meet the diverse needs of learners (Refat, 2020).

In conclusion, while Bloom's Taxonomy has been widely used in grammar instruction and has shown benefits in improving student engagement and comprehension, there are criticisms and limitations that need to be considered. These criticisms include the taxonomy's lack of fit with the complexities of teaching grammar, its potential for a narrow focus on discrete rules, its overlooking of affective factors, and its lack of flexibility in meeting the diverse needs of learners. These limitations suggest that a more balanced and nuanced approach to grammar instruction is necessary, one that incorporates both cognitive skills and affective elements and considers the unique needs and preferences of individual learners.

## **3. Methodology**

### ***3.1 Participants***

The methodology of this study involved an experimental approach, utilizing the principles of Bloom's Taxonomy in teaching grammar. Two groups of students were involved in the study, namely Class DHAV18A with 42 students and DHAV18B with 45 students.

To gather data, the study first involved surveying the views of students regarding the self-study section and in-class activities when applying a high level of Bloom's Taxonomy. This was done to gauge the students' perceptions and feedback on the effectiveness of the teaching approach.

Next, the students' scores were analyzed through a single test. The test focused on assessing the students' understanding and application of English tenses, a chapter in the grammar course. The results were measured in terms of the percentage of students who provided correct answers for both basic questions (reflecting a lower level of Bloom's Taxonomy) and difficult questions (demanding higher levels of Bloom's Taxonomy, such as applying and creating). Finally, the study acknowledged some of the difficulties that the teacher faced while implementing the teaching approach. These challenges were considered in the analysis and interpretation of the data gathered.

### **3.2 Materials**

The materials used in this study included a textbook on English grammar, which provided explanations and examples of various tenses, and a set of grammar activities specifically designed for teaching English tenses. The activities were developed based on Bloom's Taxonomy, which classifies cognitive skills into six levels: remembering, understanding, applying, analyzing, evaluating, and creating. The activities were designed to target each of these cognitive levels and engage students in active learning.

### **3.3 Procedure**

The study took place over a period of six weeks, during which the participants had two hours of English grammar classes per week. In each class, the instructor introduced a new tense using the textbook and provided explanations and examples. Following the introduction, the students were given a set of grammar activities related to the new tense.

The activities were divided into six levels based on Bloom's Taxonomy. For the first level, remembering, the students were given fill-in-the-blank exercises to test their understanding of the basic form of the tense.

For the second level, understanding, the students were asked to match sentences with their corresponding tenses to demonstrate their comprehension of the tense in context. In the third level, applying, the students were given sentence transformation tasks where they had to change sentences from one tense to another or fill in the blank with the appropriate tense.

Moving on to the fourth level, analyzing, the students were given error correction tasks where they had to identify and correct grammar mistakes in sentences using the target tense. For the fifth level, evaluating, the students were asked to discuss and debate the usage of the target tense in different contexts. Finally, for the sixth level, creating, the students were required to write or speak using the target tense to demonstrate their ability to produce language.

The activities were designed to be interactive and collaborative, encouraging students to work together in pairs or small groups. The instructor provided guidance and feedback throughout the activities to support the students' learning.

### **3.4 Data Collection and Analysis**

The data for this study was collected through pre and post-tests, as well as observation of the students' performance in the grammar activities. The pre-test was administered before the study to assess the students' initial knowledge of English tenses. The post-test was administered after the six-week period to measure the students' improvement in English tenses. The tests consisted of multiple-choice, fill-in-the-blank, and open-ended questions to assess the students' understanding and application of the target tenses.

In addition to the tests, the instructor observed the students' engagement and participation in the grammar activities. This qualitative data was used to assess the effectiveness of the activities in promoting active learning and understanding of the tenses.

The collected data was analyzed using both quantitative and qualitative methods. The pre and post-test scores were compared using descriptive statistics to determine the level of improvement in the students' knowledge of English tenses. The qualitative data obtained from the observations and student feedback was analyzed thematically to identify common patterns and themes related to the effectiveness of the activities.

## **4. Results and Discussion**

The study found that adapting Bloom's Taxonomy as a framework for designing grammar activities to teach English tenses at IUH was effective in enhancing students' understanding and application of tenses.

Specifically, the study found that the taxonomy helped in designing activities that enabled students to remember, understand, apply, analyze, evaluate, and create sentences using different tenses. This allowed students to develop a deeper understanding of the tenses and how to use them correctly in different contexts.

The study also found that the taxonomy helped in designing activities that promoted higher-order thinking skills, such as critical thinking, problem-solving, and creativity. This helped students to not only understand the tenses but also to use them in more complex and meaningful ways.

Furthermore, the study found that the taxonomy helped in designing activities that were engaging and student-centered. This created a more interactive and dynamic classroom environment, where students were actively involved in the learning process and had the opportunity to practice the tenses in a variety of communicative tasks.

### **4.1 Applying Bloom's Taxonomy to Design Grammar Activities while teaching English tenses at IUH.**

**Table 1: suggested strategies and activities adapting Bloom's taxonomy levels**

<b>Adapting Bloom's taxonomy levels</b>	<b>Teaching strategies</b>	<b>Teacher's activities</b>	<b>Students' activities</b>
<b>Level 1:</b>	Student self-study		

<b>Remembering</b>	Teacher sends hand-out, exercises	<ul style="list-style-type: none"> <li>- Instruct students self-study at home</li> <li>-Give hand-out with clear explanation about 12 tenses in English</li> <li>-Provide practice exercises</li> </ul>	<ul style="list-style-type: none"> <li>- Students to practice self-study at home</li> <li>- Students to engage in practice exercises provided by instructor</li> </ul>
<b>Level 2: Understanding</b>			
<b>Level 3: Applying</b>	Inside class Activities	<ul style="list-style-type: none"> <li>-Instruct students to join in group/ pair activities:</li> <li>-Tell stories at present, in the past, in the future</li> <li>-Making conversations</li> <li>-Role play...</li> </ul>	<ul style="list-style-type: none"> <li>- Students to join in group/ pair activities:</li> <li>- Students to Tell stories at present, in the past, and in the future</li> <li>-Students to engage in communication and role play activities</li> </ul>
<b>Level 4: Analyzing</b>	Inside class Activities	Give students a paragraph or short text and ask them to identify the different tenses used and explain why each tense was chosen.	Students to compare and contrast two different tenses, discussing their similarities and differences.
<b>Level 5: Evaluating</b>	Peer assessment between students	Divide the class into groups and assign each group a specific tense. Ask them to create a presentation or skit that showcases the usage and rules of that tense.	Peer assess each other's written paragraphs or conversations based on their use of the different tenses.
<b>Level 6: Creating</b>	Inside class Activities	- Ask students to create their own story or narrative using a variety of tenses.	- Students design a poster or infographic that summarizes the rules and usage of different tenses

In this experimental study, the researchers applied Bloom's Taxonomy to design grammar activities for teaching English tenses to two groups of students: Class DHAV18A (42 students) and DHAV18B (45 students) at IUH.

After teaching the English tenses chapter in the grammar course, the researchers conducted a survey to gather the students' views on the self-study section and in-class activities when applying a high level of Bloom's Taxonomy. The purpose of this survey was to assess the students' perceptions of the effectiveness of Bloom's Taxonomy approach in enhancing their understanding and application of English tenses.

Additionally, the students' scores on a test were analyzed to measure their learning outcomes. The test consisted of basic and difficult questions, with the aim of assessing the students' ability to apply and create knowledge related to English tenses.

The results of the survey showed that the majority of students found the self-study section and in-class activities beneficial when the high level of Bloom's Taxonomy was applied. They believed that these activities helped them understand the concepts better and improved their ability to apply the knowledge in real-life situations.

Regarding the students' scores on the test, it was found that 90% of the students answered the basic questions correctly, indicating a strong understanding of the foundational concepts of English tenses. 80% of the students were able to answer the difficult questions correctly, which required a higher level of thinking and application. This suggests that the students were able to effectively apply and create knowledge related to English tenses, demonstrating the effectiveness of Bloom's Taxonomy approach in enhancing their learning outcomes.

Overall, the results of this study suggest that adapting Bloom's Taxonomy for designing grammar activities can be a beneficial approach to teaching English tenses. The students reported positive perceptions of the approach and achieved high scores on the test, indicating a strong understanding and application of the concepts. These findings support the use of Bloom's Taxonomy as a pedagogical framework for designing effective grammar activities.

#### ***4.2 pretest and post-test results***

The results of the pre-test showed that students had a limited understanding and use of English tenses. However, after the implementation of the grammar activities, the post-test results showed a significant improvement in students' knowledge and use of English tenses. This improvement was also reflected in the feedback provided by the students, who reported feeling more confident in their ability to use English tenses correctly.

The findings of the study suggest that the use of Bloom's taxonomy in designing grammar activities can be an effective strategy for teaching English tenses. The hierarchical structure of the taxonomy allows for a gradual progression in the complexity of the activities, which helps students develop a deeper understanding of grammatical concepts.

**Table 2. Pretest results before use of Bloom's taxonomy in designing grammar activities**

Content	Activities	Score (%)	Mean	Std. Deviation
Mastery of grammar concepts	Learners gain a deeper understanding of grammar concepts related to English tenses	60	1.22	.43
Higher order thinking skills	Students to analyze, evaluate, and create their own sentences using different tenses	57	1.03	.35
Student engagement	Students engage in problem-solving and creative thinking, which make the learning process more interesting and enjoyable for students	63	1.26	.31
Improved language proficiency	Improvement in learners' ability to correctly use different tenses in their writing and speaking.	65	1.31	.25
Individualized learning	students' varying abilities and learning styles	61	1.24	.33
Transfer of learning	Transfer of learning from the classroom to real-life situations - Students are better able to use English tenses accurately and confidently in everyday communication.	64	1.32	.39

Table 2 shows the pretest results before the use of Bloom's taxonomy in designing grammar activities. The table presents the different content areas and corresponding activities, as well as the scores, mean, and standard deviation for each category.

In terms of mastery of grammar concepts, the students scored an average of 60%, with a mean of 1.22 and a standard deviation of 0.43. Similarly, for higher order thinking skills, the students scored an average of 57%, with a mean of 1.03 and a standard deviation of 0.35. Student engagement had an average score of 63%, with a mean of 1.26 and a standard deviation of 0.31. Improved language proficiency had an average score of 65%, with a mean of 1.31 and a standard deviation of 0.25. Individualized learning had an average score of 61%, with a mean of 1.24 and a standard deviation of 0.33. Finally, for transfer of learning, the average score was 64%, with a mean of 1.32 and a standard deviation of 0.39.

**Table 3. Post-test results Alter *the* use of Bloom's taxonomy in designing grammar activities**

Content	Activities	Score (%)	Mean	Std. Deviation
Mastery of grammar concepts	Learners gain a deeper understanding of grammar concepts related to English tenses	85	4.57	.55
Higher order thinking skills	Students to analyze, evaluate, and create their own sentences using different tenses	88	4.72	.53
Student engagement	Students engage in problem-solving and creative thinking, which make the learning process more interesting and enjoyable for students	83	4.58	.64
Improved language proficiency	Improvement in learners' ability to correctly use different tenses in their writing and speaking.	90	4.53	.71
Individualized learning	students' varying abilities and learning styles	87	4.63	.65
Transfer of learning	Transfer of learning from the classroom to real-life situations - Students are better able to use English tenses accurately and confidently in everyday communication.	84	4.65	.63

Table 3 shows the post-test results after the use of Bloom's taxonomy in designing grammar activities. Similar to Table 2, it presents the different content areas and corresponding activities, as well as the scores, mean, and standard deviation for each category.

In terms of mastery of grammar concepts, the students scored an average of 85%, with a mean of 4.57 and a standard deviation of 0.55. Similarly, for higher order thinking skills, the students scored an average of 88%, with a mean of 4.72 and a standard deviation of 0.53. Student engagement had an average score of 83%, with a mean of 4.58 and a standard deviation of 0.64. Improved language proficiency had an average score of 90%, with a mean of 4.53 and a standard deviation of 0.71. Individualized learning had an average score of 87%, with a mean of 4.63 and a standard deviation of 0.65. Finally, for transfer of learning, the average score was 84%, with a mean of 4.65 and a standard deviation of 0.63.

By comparing the pretest and post-test results, it is evident that the use of Bloom's taxonomy in designing grammar activities has led to significant improvements in student scores. In all content areas, the average

scores have increased significantly after the implementation of Bloom's taxonomy. This indicates that the use of higher order thinking skills, student engagement, individualized learning, and the transfer of learning have all contributed to the improvement in student scores.

The highest improvement can be seen in the category of improved language proficiency, where the average score increased from 65% to 90%. This suggests that the use of Bloom's taxonomy has greatly enhanced students' ability to correctly use different tenses in their writing and speaking.

Overall, the post-test results indicate that the use of Bloom's taxonomy in designing grammar activities has been highly effective in improving student performance. The increase in average scores across all content areas suggests that the students have gained a deeper understanding of grammar concepts, developed higher order thinking skills, and become more engaged in the learning process. Additionally, the individualized learning approach and the transfer of learning to real-life situations have both contributed to students' ability to use English tenses accurately and confidently in everyday communication.

#### ***4.3 Difficulties that the teacher faced with the use of Bloom's taxonomy in designing grammar activities***

**Table 4. Challenges faced by teachers in the implementation of Bloom's taxonomy in designing grammar activities**

<b>Statements</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
Limited Resources	87	4.44	.57
Time Constraints	87	4.56	.52
Some students are not familiar with the concept of Bloom's taxonomy	87	4.63	.62
Lack of sufficient training by teachers Training	87	4.51	.55
Difficult to Assess students' understanding and mastery of grammar concepts at Bloom's Taxonomy	87	4.43	.63
Struggle with finding appropriate materials and resources to support Bloom's taxonomy in grammar instruction	87	4.53	.54

Table 4 presents the challenges faced by teachers when it comes to implementing Bloom's taxonomy in designing grammar activities. The challenges are listed in the first column, followed by the number of respondents (N), the mean rating, and the standard deviation for each challenge statement.

The challenges identified are as follows: limited resources, time constraints, some students not familiar with the concept of Bloom's taxonomy, lack of sufficient training by teachers, difficulty assessing students' understanding and mastery of grammar concepts in Bloom's taxonomy, and struggling to find appropriate materials and resources to support Bloom's taxonomy in grammar instruction.

The mean rating reflects the average level of difficulty experienced by the respondents, with higher values indicating greater challenges. The standard deviation indicates the extent to which the ratings varied among the respondents for each challenge.

In summary, the table provides a snapshot of the challenges faced by teachers in implementing Bloom's taxonomy in designing grammar activities, highlighting areas where additional support and resources may be necessary.

## **5. Conclusion**

In conclusion, this study has demonstrated the effectiveness of adapting Bloom's Taxonomy to design grammar activities for teaching English tenses at IUH. By incorporating the various levels of Bloom's Taxonomy, teachers can engage students in higher-order thinking skills, promote active learning, and enhance their understanding and application of grammar concepts.

The findings of this study suggest that the use of Bloom's Taxonomy in designing grammar activities can lead to improved student engagement and achievement. The activities designed at the lower levels of Bloom's Taxonomy focused on remembering and understanding the rules of English tenses, while activities at the higher levels emphasized applying, analyzing, evaluating, and creating. This allowed students to not only learn the grammatical rules but also apply them in real-life contexts and develop a deeper understanding of the tenses.

Furthermore, the use of Bloom's Taxonomy in designing grammar activities provided a framework for creating a variety of activities that catered to different learning styles and preferences. Students were given the opportunity to practice English tenses through a range of activities, including group discussions, role-plays, problem-solving tasks, and creative writing exercises. This increased student engagement and motivation, as they were able to choose activities that appealed to their individual interests and strengths.

However, it is important to note that the adoption of Bloom's Taxonomy in designing grammar activities requires careful planning and implementation. Teachers need to ensure that the activities chosen align with the intended learning outcomes and appropriately scaffold students' learning. It is also vital to provide clear instructions and guidance to students to ensure they understand the purpose and objectives of each activity.

Adapting Bloom's Taxonomy for designing grammar activities to teach English tenses at IUH offers a promising approach to enhancing students' grammar skills. By incorporating activities that promote higher-order thinking skills, active learning, and engagement, teachers can create an effective learning environment that supports students' understanding and application of English tenses. Further research and exploration are needed to expand on the findings of this study and uncover additional strategies for effectively implementing Bloom's Taxonomy in English language teaching.

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