

CHAPTER 2

LITERATURE REVIEW

This chapter establishes a theoretical background for the current study through the examination of relevant literature on Higher-Order Thinking Skills (HOTS), Critical Thinking, Task-Based Language Teaching, English Public Speaking and previous studies. Firstly, the concept of HOTS which includes its definition, the indicators of HOTS, and HOTS integration in teaching English is taken into consideration. Secondly, the nature of TBLT is approached to review and incorporate in the teaching methodologies. Thirdly, English Public Speaking is addressed in a separate section. Finally, a summary of previous studies is provided to pinpoint the research gap.

2.1 Higher-Order Thinking Skills (HOTS)

2.1.1 Definitions of HOTS

Although Higher-Order Thinking Skills (HOTS) have been known among educators and scholars for such a long time, HOTS have recently become an attractive academic term in English language teaching and learning in the 21st century (Alwadai, 2014; Chen, 2016; Seman et al., 2017). With this key term, HOTS have been defined by various scholars as presented in the subsequent table 2.1

Table 2.1 Definitions of HOTS

Author	Year	Definition
Newman	1990	People with good capacity with HOTS mean they have good ability in clarifying the input, distinguishing ideas, arguing with others, comprehending complicated problems.
Lewis and Smith	1993	HOTS is actually a thinking which occurs when people can take the input. They later interrelate the input in memory and other sources to discover innovative answers for complex situations.
Andeson and Krathwohl	2001	HOTS are the thinking process of analysis, evaluation, and creation.
Miri et al.	2007	HOTS are thinking strategies including critical thinking, systematic thinking, and creative thinking. People use these thinking strategies for accomplishing the facing difficulties or identified targets.
Gregory and Schraw	2011	the mental activities with inductive, deductive, elaborative, and transformative ways oriented towards generative, complicative, persuasive, and reflective knowledge.
Kuswana	2012	HOTS are high level thinking including critical and creative thinking directed by meaningful truth, innovative ideas, and the mutual interaction of criteria, values, reasons, and emotion. These thinking skills are essential for tertiary students because they can practice thinking objectively, logically, and creatively for generating their own ideas for solving complicated issues.

Table 2 illustrates the definitions of HOTS from different scholars. Most of the definitions deal with the students' abilities in taking care of the information in the issues for making further choices in complicated circumstances. Newman (1990) and Lewis and Smith (1993) emphasize the interrelation between the input and people's previous experience and background knowledge in figuring out reasoning answers for complicated questions or problems. These two definitions are different with the HOTS definition stated by Anderson and Krathwohl (2001), Miri et al. (2007), and Gregory and Schraw (2011), HOTS, to them, are the thinking process where students are required to have appropriate thinking strategies for handling complex situations with persuasive evidence and explanation. Although this thinking process is claimed distinctly with various adjectives and nouns, they share the similar expressions with analyzing, evaluating, and creating information as defined by Anderson and Krathwohl (2001) and their sub-skills. According to Anderson and Krathwohl (2001), HOTS are the thinking ability located on the top of three levels of Bloom's taxonomy (Bloom, 1956), both original and the revision include analyzing, evaluating, and creating.

Further explanation for these three dimensions' cognitive domains and their subskills is claimed by Anderson and Krathwohl as follows. Analysis, firstly, is the ability to separate the given material into constituent parts and comprehending how those parts related to each other. This thinking stage illustrates the cognitive subskills of distinguishing, organizing, and attributing. Secondly, evaluation is involved with judgement performance based on a series of individually specific criteria and standards on the quality, the efficiency, the consistency, and the other related characteristics. Evaluation is a category concerned with the subskills of cognitive manipulation for internal consistency judgement and criticism for external criteria judgement. Creation, finally, is the mental phrase connecting all the isolated elements together for a final tangible and innovative answer generation via the subskills of generating, planning, and producing.

In this study, HOTS are interpreted as follows: HOTS happen when students receive new information and then store that information in their interconnected memories. The students subsequently retrieve their previous experience, rearrange the separate pieces of information and expand information by their own ways for achieving a reasonable goal or figuring out the most possible and appropriate answers for the complex situations. According to Lewis and Smith (1993), HOTS are a kind of thinking process applied in various ways to a wide range of scientific disciplines for students' critical thinking, problem solving, decision-making, and creative thinking stimulation. Although Lewis and Smith (1993) emphasize HOTS on students' four essential thinking

skill achievements, this study claims critical thinking improvement only due to the overlapped among the thinking capacities because critical thinking is the most important element directly contributing to the students' successful thinking when they realize how to analyze, evaluate, and create innovative solutions or decisions in complicated encountered situations. As the results, HOTS are extremely useful skills to be trained for enhancing students' English Public Speaking and their critical thinking.

2.1.2 The indicators of HOTS

According to Anderson and Krathwohl (2001), there are some typical indicators for separating HOTS into analyzing, evaluating, and creating thinking process as presented in the Table 2.2

Table 2.2 The indicators of HOTS subskills

Category	Subskills	Indicators
Analyzing	Differentiating	Discriminating, distinguishing, focusing, selecting
	Organizing	Finding coherence, integrating, outlining, parsing, structuring
	Attributing	Deconstructing
Evaluating	Checking	Coordinating, detecting, monitoring, testing
	Critiquing	Judging
Creating	Generating	Hypothesizing
	Planning	Designing
	Producing	Constructing

From Table 3, regarding “analyzing”, it is argued as the capacity of dividing the given materials or concepts into smaller constituent parts and logical explain for the correlation among the related parts, according to Anderson and Krathwohl (2001) and Brookhart (2010) with three essential subskills including differentiating, organizing, and attributing. For “differentiating”, it is the ability to differentiate the relevant/irrelevant or important/usefulness information from the general picture (Krathwohl, 2002) with some indicators like discriminating, distinguishing, focusing, and selecting. “Organizing” is stated as the ability entailing both communicative and interrelation factors which demonstrate the connection of the separated parts unitedly under a coherent body. Students in organizing have a tendency to build the connections among the presented information pieces systematically and coherently by some behavioral verbs such as finding coherence, integrating, outlining, parsing, and structuring. “Attributing” is considered as the ability occurring when students can ascertain the implicitly communicative intentions.

For “evaluating”, it is described as an assessment factor based on individually specific criteria and standard. It is argued as a cognitive process for evaluation capacity which scrutinizes the assumed judgements based on the internal

and external consistency via the subskills of checking and critiquing. This evaluation category can be accepted only with the support of reasonable argument and concrete verification, based on Anderson and Krathwohl (2001). With “checking”, it is the inconsistencies detection or errors identification during a process or in a product. The checking process operates when students require the appropriation between the presented conclusion and the premise, explore whether the obtained data can support or reject the hypothesis or not, and investigate the internal inconsistencies or the ineffectiveness of the procedure via some indicators like coordinating, detecting, monitoring, and testing. As “critiquing”, it concerns product judgement or operation judgement depending on the apparently unspecified criteria and standards. Students, in criticism, usually specify the strengths and weaknesses of their products and subsequently figure out their own assessment via the behavioral verb of judging.

Relating to “creating” as stated in Bloom’s taxonomy, creating is defined as the process of existing things arrangement or the different things combination in imaginative ways within the three typical subskills of generating, planning, and producing. According to Anderson (2001), firstly for “generating”, students figure out their own different hypotheses based on the individually inconsistent criteria or standard with the indicator of hypothesizing. Secondly, “planning” is the stage in which all the methods and solutions will be planned by students themselves and be converted into actions for task completion via the behavioral verb of designing. Finally, “producing” is the final stage when students begin implementing plans for solving their problems or making final decisions based on specific and certain criteria via the indicator of constructing.

2.1.3 Integration HOTS into English teaching

According to Sullivan and Lilburn (2004), these three features should be integrated in HOTS-based questions. Firstly, HOTS-based questions assist students in comprehending more information rather than merely memorizing and reproducing it. This implies that students not only retain and recall isolated information in classrooms but also demonstrate a deeper critical understanding of the connections between them. Secondly, HOTS-based questions should encourage students to learn language and improve their critical thinking by answering and expressing their personal viewpoints from the teachers’ delivered authentic input. Teachers should design critical questions to boost students’ innovative ideas during their learning process. Finally, HOTS-based questions may probably have various answers for encouraging students to produce their personal output.

Furthermore, according to Brookhart (2010), there are two typical principles for HOTS incorporation. Firstly, teachers should facilitate students' thinking through introductory text, visuals, or given problems. With an "introductory text", teachers provide students an overview of the text and prompt them to speculate about its possible outcomes by stimulating their background and thinking. For "visuals", teachers require students to infer the implicit and explicit meanings of the pictures. In terms of "problems", students receive the problems from teachers, then think and try to give the most appropriate solution to the problem. Secondly, teachers can utilize other extra materials which are not covered in the classes.

Additionally, Cox (2019) also suggests some useful HOTS training strategies for drilling students' critical thinking effectively such as designing problem-solving questions, using "mind movies", giving inference questions, using graphic organizers, and giving students QARs (Question-Answer Relationship). Regarding "designing problem-solving questions", teachers may help students and drill their critical thinking by giving them some problems and asking for solutions. In terms of "using mind movies", teachers can encourage students to close their eyes and imagine a movie playing in their mind when the learned new concept. It is a way of asking students to imagine something given by the teachers. This application of HOTS truly helps students maximize their powerful critical and creative thinking skills. As far as "giving inference questions", teachers can also train students thinking critically by asking them to make an inference about something in the lessons. In the case of "using graphic organizers", this is a nice teaching way for framing students' thoughts in organized manners via drawing diagrams or mind maps. As a result, they can connect concepts better. Finally, for "giving students QARs (Question-Answer Relationship)", this is a way to ask students to label the type of asking questions, using information later for formulating innovative answers. To conclude, although those techniques have been claimed for its advantages in application for students' critical thinking improvement, they seem not appropriate for being conducted in this study due to its complicated English Public Speaking context.

The suggested techniques are more suitable for primary and high school students. Furthermore, such kinds of HOTS incorporation question design seem mainly focus on enhancing students' low order thinking skills when students just read for comprehending the given materials, remembering the key points, and applying it to complete the tasks, not Higher - Order Thinking Skills as argued by Anderson and Krathwohl (2001). The features of HOTS-based tasks as stated by Brookhart (2010) and Sullivan and Lilburn (2004) have been preferred in this study's HOTS-based tasks design

because students' thinking ability in analyzing, evaluating, and creating will be highlighted for various information exchange and debate activities with the appreciation of different opinions.

2.1.4 The reasons for HOTS integration in this study

As agreed by Larrison (2017), Daud (2017), and Retnawati et al. (2018), students should be equipped with 21st century skills before entering the workforce after graduation. That is because 21st century is the era of open knowledge, where free access information, the economic globalization, and advanced technology have developed significantly, bringing dramatical transformation to all aspects of lives, especially education fields (Chai et al., 2017; Singh et al., 2018). Therefore, to cope with the development of the 21st century, it is necessary for students to possess essential skills, particularly HOTS including four thinking groups namely critical thinking, creative thinking, decision making, and problem solving (Greenstein, 2012; Kay, 2009, Sukla & Dungsungneon, 2016).

This study mainly focuses on Critical Thinking (CT), an essential thinking ability for EFL tertiary students because of the partnership for 21st century skills which students must have is Critical thinking (CT) (Rotherham & Willingham, 2009; Saavedra & Opfer, 2012; Ball & Garton, 2005), which is the process of analyzing, evaluating, and creating the obtained information from observation or experiences directly involved in cognitive and affective domain as stated in Bloom's Taxonomy stated by Anderson and Krathwohl (2001). According to Lai (2011), CT is the students' thinking ability reflected in their process of analyzing arguments, making conclusions by using reasoning, assessing or evaluating, making decisions, or solving problems. Furthermore, Lai (2011) also claims that CT in educational context is considered as an objective decision-making process and self-control that results in boosting their interpretation, analysis, evaluation, conclusion, conceptual consideration, and methodology underlined in their learning subjects.

Critical thinking skills are argued as one of the most empowered learning outcomes because it completely can cause great influences on students' cognitive learning goals (Facione & Gittens, 2012; Seventika et al., 2018) and their English language acquisition (Butler, 2012; Yang et al., 2014; Gandimathi & Zarei, 2018). To her personal argument, CT is simply the students' ability in figuring out their individual viewpoints with reasoning explanation after the conscious mental processes of analyzing, evaluating and creating for any complicated or unfamiliar problems. The better thinking quality, the better language students can perform, too. Consequently,

HOTS-based tasks are incorporated in this study for enhancing tertiary students' not only English Public Speaking but also their critical thinking skills.

2.2 Critical Thinking

2.2.1 Definitions of Critical Thinking

A significant evolution of critical thinking has taken place with two big perspectives - the West and East - and it has become a predominant concept in education during the 1990s (Atkinson, 1997; Le & Chong, 2024). Critical thinking has been variously defined by scholars as illustrated in the following table 2.3.

Table 2.3 Definitions of critical thinking

Author	Year	Definition
Kurfiss	1988	Critical thinking is viewed as an inquiry aimed exploring a situation, phenomenon, question, or problem to generate a hypothesis or conclusion that convincingly integrates all the available information.
Facione	1990	Critical thinking involves personal judgement stemming from individual interpretation, analysis, evaluation, and inference coupled with relevant evidential, conceptual, methodological, or contextual thoughts. It encompasses six key skills: 1. Interpretation (categorization, decoding significance, clarifying meaning) 2. Analysis (examining ideas, identifying arguments, analyzing arguments) 3. Evaluation (assessing claims, assessing arguments) 4. Inference (querying evidence, conjecturing alternatives, drawing conclusions) 5. Explanation (stating results, justifying procedures, presenting arguments) 6. Self-regulation (self-examination, Self-correction)
Dick	1991	According to Dick's Critical thinking taxonomy, an individual with strong critical thinking skills tends to: 1. Identify arguments, encompassing themes, conclusion, reasons, and organization 2. Analyze arguments, covering assumptions, vagueness, and omissions 3. Consider external influences, such as value, authority, and emotional language 4. Offer scientifically analytical rationales, including causality and statistical reasoning 5. Present logical reasons, utilizing analogy, deduction, and induction
Paul	1992	Critical thinking is defined as an intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, and synthesizing generated from personal observation, experience, reflection, reasoning, or communication as a rubric to any beliefs and actions.
Esterle	1993	Critical thinking is described as the capacity to evaluate and judge evidence, arguments and circumstances without being influenced by one's personal beliefs and opinions.
Pithers & Soden	2000	'Critical thinking involves the skills of identifying worthwhile questions, engaging in self-directed exploration and interrogation of knowledge to pursue those questions, acknowledging the contestable nature of knowledge, and effectively presenting evidence to support one's arguments.
Bassham et al.	2008	Critical thinking is claimed as a decision-making process that involves clear and reflective thinking, the capacity to discern the relevance of different information prior to reaching a decision or forming a rational conclusion

As presented in Table 4, the definitions of critical thinking differ over time due to the different perceptions of scholars. Those definitions, along with the descriptions of the critical thinking subskills as defined by Dick (1991), Facione (1990), and Paul (1992), as cited in Alsaleh (2020), provide a comprehensive foundation for understanding the components of critical thinking as compared to other scholars such as Bassham et al. (2008), Esterle (1993), Kurfiss (1988), Pithers and Soden (2000) as cited in Alsaleh (2020). Although there are some differences among the subskills mentioned by Dick (1991), Facione (1990), and Paul (1992) in the table, they emphasize the core components of analyzing, evaluating, and creating during the students' critical thinking process which are completely equivalent with the Higher - Order Thinking Skills as mentioned in Anderson and Krathwohl (2001). As a result, the similarities are found between HOTS claimed by Anderson and Krathwohl (2001) and critical thinking skills and come to the hypothesis that students' critical thinking skills can be improved by the HOTS tasks.

Although many scholars claim the important role of both critical thinking and problem solving in the 21st century, critical thinking is essential for achieving effective problem - solving (Rahman, 2019). People need time to acquire knowledge and make decisions. Critical thinking happens before we decide to believe or conduct actions with personal assumption and solutions (Paul & Elder, 2008). It is believed that tertiary students are expected to be trained to improve their critical thinking to logically reflect their knowledge instead of using any information transferred from lecturers, other students, and other available resources. Later, students can find their individual answers and solutions for their problems. Furthermore, students who can think critically tend to be open-minded in accepting opposing ideas from other people, updating and comparing new information, and evaluating the related evidence to support their personal argument with various reasons (Ennis, 2011; Brookfield, 2012).

2.2.2 The western perceptions of Critical Thinking

Critical thinking, as defined in recent literature, has reflected cultural influences from the U.S. during the late 1970s and early 1980s and has evolved in response to global economic and political shifts. This modern definition emphasizes creativity and imagination, aiding students in navigating complex issues (Le & Chong, 2024; Bean & Melzer, 2021; Facione et al., 2000; Paul & Binker, 1990). Studies reveal significant cultural differences in the perception and practice of critical thinking between Western and Eastern societies.

Firstly, cultural differences significantly impact the components and perceptions of critical thinking. Hofstede (2001) identifies distinct value and behavior

differences between East and West, influencing critical thinking traits. Similarly, Moore et al. (2022) observe that Western students tend to emphasize individualism and autonomy, while Eastern students prioritize community cohesion and cooperation. Besides, research on cultural self-identification further demonstrates how cultural backgrounds shape cognitive and motivational aspects of critical thinking. Liyanage et al. (2021) conduct a study on the groups of advisors that supervise local and international students in Australia about critical thinking. The results show that they are incapable of identifying the socio-cultural situations and the capacities of different students as critical thinkers. The reasons are based on the student capabilities, denial of assessment focus, illimitable scaffolding, and overlooking alternatives. From the studies of Markus and Kitayama (1991) and Liyanage et al. (2021), the Western cultures prefer to employ independent thoughts with confidence and assertiveness. These studies also show the differences between the West and East in expressing the critical components.

Taken together, critical thinking relies on the individuals' judgements in the Western cultures, e.g., the U.S (Ringmar, 2001; Hofstede, 2001; Moore et al., 2022; Le & Chong, 2024). These studies also show the existence of critical thinking in the oral presentation of the students and the development of public speaking skills. The cultural gaps between Western and Eastern countries lead to the fallacies of viewpoints of what creates critical thinking skills. However, the shared characteristics of the West and the East societies about critical thinking are the values of cognitive skills and critical dispositions (Le & Chong, 2024).

2.2.3 The Asian and Vietnamese students' perceptions of critical thinking

Studies on critical thinking across different cultures reveal notable differences in the skills and perceptions of students from Asian and Western backgrounds. Research indicates that Asian students often demonstrate lower levels of critical thinking compared to their Western peers (Moosavi, 2020; Davies, 2011).

Specific investigations, such as Stapleton's (2001) study on Japanese undergraduates' critical thinking ability. The selected factors consist of arguments, evidence, opposite viewpoints and fallacies based on the common topics in the ESL textbooks. The findings report that students show their deep understanding in the issues that they have more socio-cultural knowledge. Besides, the East students, e.g., Japanese, also possess an adequate knowledge to produce a well-organized argument, even with unfamiliar topics. They can explain logically, compare, analyze, and use their personal experiences to convince their points effectively, which shows their critical thinking skills. According to Stapleton (2001), the differences in students' knowledge

determine their performance in critical thinking and their improvement in public speaking skills.

Moreover, Ramanathan and Kaplan (1996a) explore the importance of critical thinking by examining 12 first-year composition textbooks through three channels, including using informal logic to improve the reasoning strategies, enhancing students' problem-solving skills, and improving students' abilities to identify hidden assumptions in daily arguments. The results show that critical thinking relies largely on socio-cognitive practice and the shared cultural practice plays an important element to develop students' critical thinking and public speaking abilities. Besides, Ramanathan and Kaplan (1996b) explore the audience and voice of 10 first-year writing textbooks in the U.S. Eight of ten textbooks reveal that the act of writing/reasoning plays a key role to improve critical thinking skills. The issue of critical thinking is also related to the concept of citizenship, individualism, and cultural awareness. The problem is that the West countries, e.g., the U.S, value the individualism in their culture, which was similarly found in the study of Atkinson and Kaplan (1994). From these two studies, their evaluations are based on their exploration of the textbooks of L1 first-year students (Stapleton, 2001).

Additionally, Wang and Chen (2024) explore the critical thinking composition by examining 18,737 Chinese students in 13 provinces. The results show that the average score illustrates the improvement of their critical thinking skills and public speaking skills. This study demonstrates improvements in critical thinking among Chinese students, noting better performance in open-minded environments and urban areas. Students' abilities are linked to self-examination, inquisitiveness, and evidence-based reasoning, contrasting with rural settings where independent thinking is less encouraged.

In the same vein, Le and Chong (2024) carried out a study to explore the perceptions of three domains' critical thinking of Malaysian and Vietnamese undergraduate students. From the cognitive aspect, two approaches were utilized, including the idealistic and the realistic perspectives. In terms of dispositional aspect, it resolved the collectivist and individualist perspectives. Regarding spoken discourse, the product-oriented and the process-oriented methods were explored. The results showed Malaysians and Vietnamese students improved their critical thinking through dialogic lens and they were influenced by academic maturity, critical reading skills, and cultural values. Some participants perceived critical thinking as collaboration and cooperation; therefore, they emphasized the importance of effective communication, interpersonal relationships, and cognitive skills. The findings also reported the

differences of critical thinking perspectives between the Eastern and Western students as well as how the public speaking skills were developed in their presentations in classroom contexts.

Finally, Chua et al. (2012) illustrated the importance of metacognition in the context of intercultural creative collaboration by comparing the U.S and other backgrounds, e.g. Middle Eastern. They concluded different groups of people, who developed their affect-based trust in day-to-day conversation, were able to boost creative collaboration based on their cultural assumptions. They also reported the importance of understanding creativity, innovation, and problem solving to develop critical thinking in the multicultural environment. Metacognition plays a key role in navigating intercultural interaction, enhancing creative collaboration, and developing critical thinking. Likewise, Lu et al. (2018) explore the East Asian perspective, e.g., China, in terms of the multicultural environment and the intercultural communication. The results claim that people are less open when they are in a more culturally diverse environment, which may hinder information elaboration and reduce creativity. From these two studies, there is a relationship between the decision-making process and interpersonal communication in the critical thinking skills in both the West and East culture. The results also demonstrated that students with critical thinking can develop their public speaking skills via their oral presentations in class.

Overall, while critical thinking and public speaking skills are developed through various activities at a tertiary level, perceptions of these skills in relation to cultural and educational contexts remain underexplored, particularly in Vietnam (Wang & Wu, 2023; Floyd, 2011; Paton, 2011).

2.2.4 HOTS- tasks and critical thinking improvement

As proposed by Daud (2017); Larrson (2017); and Retnawati et al. (2018), students should be equipped with 21st century skills before entering the workforce after graduation because 21st century is the era of opened knowledge, where the openness information, the economic globalization, and advanced technology have developed significantly, bringing dramatical transformation to all aspects of lives, especially education field (Chai & Kong, 2017; Lin et al., 2018; Singh et al., 2017). Therefore, as stated by Kay (2009), Greenstein (2012), Ristanto et al. (2022), Sukla and Dungsungneon (2016), the development of the 21st century requires students with essential skills facing the era of globalization, particularly HOTS including four big thinking groups namely critical thinking, creative thinking, decision making, and problem solving are the necessary skills as reliable workforce.

Additionally, Critical Thinking, as defined by Lai (2011), in educational context is considered as an objective decision-making process and self-control that result in boosting their interpretation, analysis, evaluation, conclusion, conceptual consideration, and methodology underlined in their learning subjects. However, in agreement with Ball and Garton (2005), Saavedra and Opfer (2012), the current study mainly focuses on Critical Thinking (CT), an essential thinking ability for EFL tertiary students for 21st century skills. CT is argued as the process of analyzing, evaluating, and creating the obtained information from experiences directly involved in cognitive and affective domain as stated in Bloom's Taxonomy and by Anderson and Krathwohl (2001). Similarly, according to Dick (1991), Facione (1990), and Paul (1992), CT refers to students' cognitive ability through processes of analyzing arguments, evaluating information, drawing conclusions through reasoning, making decisions, and solving problems. These thinking skills are expected to improve students' public speaking abilities, particularly in the context of oral presentations.

CT skills, in this study, are argued as one of the most empowered learning outcomes because they can influence students' cognitive learning goals (Facione & Gittens (2012); Seventika et al., 2018) and their English language performances (Butler, 2012; Gandimathi & Zarei, 2018; Yang et al., 2014). Particularly, CT is claimed to be the students' ability in figuring out their individual viewpoints with reasoning explanation as a result of intensive mental processes of analyzing, evaluating and creating of any complicated or unfamiliar problems. For this reason, HOTS-based tasks are incorporated in this study for enhancing tertiary students' analyzing, evaluating, and creating skills for their critical thinking improvement.

2.3 Task-Based Language Teaching (TBLT)

2.3.1 Definitions of TBLT

According to Ellis (2006), Hashemi et al. (2012), Huynh & Nguyen (2023), Long (2016), Nguyen et al. (2018), and Willis (1996), TBLT has appeared and developed as an effective English teaching method throughout the years until now. From the aspect of theory, TBLT should be tried out as vehicles facilitating their English development as the output hypothesis supported by Swain (1985). By getting through the process of producing output, students are able to control theoretical knowledge of the target language, its form, and linguistic features. However, as claimed by Adams (2003), the output produced in various types of task-based by students is not the whole result of the language learning process but a step's specific results in the general process. In this study, each task performance is argued as the support for students to achieve

particular outcomes of L2, not mainly focus on the end of the process. Consequently, at the end of the learning process, students' L2 and critical thinking are expected to be improved via different practicing opportunities provided by a series of well-designed tasks in class.

From the teachers' perspectives, based on Ellis (2009), TBLT is a fundamental and meaningful component for developing language programs and structuring lessons. However, a notable issue arising from discussion in TBLT literature is the evolving definition of the task-based construction over the time (East, 2021). Tasks, in the past, were viewed as real-world missions beyond the classrooms like completing forms, purchasing items, or making reservations (Long, 1985). Task, nowadays, has evolved as one of primary research tools and served as a cornerstone for language instructional approaches generally (Richards & Rodgers, 2001). As evidence, Nunan (1989) describes a task as a classroom activity that engages learners in understanding, interacting, manipulating, and producing language primarily for meaningful communication, rather than focusing solely on form. Particularly, Bygate et al. (2017) argue that the characteristics of tasks significantly rely on pedagogical and research objectives, participants, and contexts. Consequently, scholars propose the application of tasks as learner-driven activities which are open to interpretation and focused on meaning for achieving a defined learning and teaching goal (Bygate et al., 2017).

As listed previously in Nunan (1989), Richards and Rodgers (2001), these definitions share the highlights on task's meanings and outcomes. Nevertheless, to evaluate whether an instructional activity is a task or not, the following features proposed by Ellis (2003, pp.9-10) should be considered.

- “1. A task is a work plan for learner activity.*
- 2. The primary focus is on meaning. To this end, a task will incorporate some kind of gap (i.e., an information, reasoning, or opinion gap) to motivate learners to use language to communicate meanings.*
- 3. A task performance reflects real world processes of language use.*
- 4. A task can involve the four language skills of reading, writing, speaking and listening.*
- 5. A task engages cognitive processes (which in turn influence language demands) such as selecting, reasoning, describing, distinguishing etc.*
- 6. A task has a clearly defined communicative outcome.”*

Subsequently, Ellis (2018a) revised these characteristics and introduced a distinct separation between task-as-workplan and task-in-process. He clarified that a

task-as-workplan represents instructional material designed for language teaching, providing students with specific input and guidance to attain desired learning outcomes. On the other hand, task-in-process refers to the activity assigned to students within a specific context for task performance.

Table 2.4 Criteria for defining a task-as-workplan (Ellis, 2018a)

Criteria	Description
Focusing on meaning primarily	The workplan is intended to encourage students to comprehend or/and produce their own messages for different communicative purposes.
Having some kinds of gap	The workplan is designed in a way to facilitate cooperation between students to convey information mutually, to express their opinions reasonably.
Relying mainly on students' linguistic and non-linguistic resources	The workplan may supply essential input only which students can borrow to perform the task. Additional presentation of the language needed will be excluded to force students draw on their existing L1 & L2 linguistic and their non-linguistic resources (e.g., gesture; facial expressions) for comprehension or/and production).
Engaging cognitive process	The workplan is designed to facilitate students' thinking skills including selecting, classifying, ordering, reasoning, and evaluating information.
Achieving clearly defined communicative outcome	The workplan specifies the task's communicative outcome. Consequently, task accomplishment is assessed by the students' correct language usage and their achieved communicative outcome.

The current study adopts the features presented in Table 5 for designing HOTS-based tasks because these features not only reflect all the essential tasks' properties as shown in Ellis's (2003) version but also provide a thorough and clear explanation for various tasks' theoretical aspects and practical for designing HOTS-based tasks. Furthermore, these features are also chosen because of the considerable agreement, citation, and application in various TBLT scholars (Hashemi et al., 2012; Huynh & Nguyen, 2023; Long, 2016; Nguyen et al, 2018).

2.3.2 Rationale of using task-based in language teaching

Various advantages of tasks in TBLT are explained as the rationale of task-based application in this study. As the evidence reported by Richard and Rogers (2001) that task based in TBLT, from the theory of learning, creates better learning context for activating students' English acquisition processes first and promotes their effective language learning later. It can be usually implied to foster students' abilities in negotiation, modification, rephrasing, and experimentation, the central points of English learning. Furthermore, from the aspect of task-based design, Gorp and Bogaert (2006) add that task-based utilization can stimulate the interaction and collaboration with peers and help them acquire target skills with more knowledgeable partners. Consequently, task-based should be carefully designed for authentic interaction and

discussion generation with meaningful information and negotiation exchange by the technique of scaffolding the students' language outputs. According to TBLT principles as defined by Ellis (2018a) and Long and Crookes (1992), the authors argued that task-based can be considered as a vehicle to produce appropriate target language from the support of authentic input. Such kind of input may assist students to reshape their target language by the activation of their general cognitive learning processes as well as opportunities generation for the delivery of comprehension and negotiation during the discussion.

In Vietnamese context, based on Chau and Cunningham (2021), English teachers prefer the teaching method that stresses grammatical mastery. This reference is rooted in the belief that students acquire English through gradual accumulation of linguistic elements. However, such an idea is not consistent with the evidence from SLA argued by Van den Branden (2006). He claimed that students cannot learn isolated L2 but rather a part of complicated map fostering both form and meaning functions' relationships. Skehan (1996) highlighted that learning to be grammatical mastery seldom helps students achieve acceptable levels of foreign language efficiency. Unlike traditional form-focused foreign language instruction TBLT does not fragment language into discrete pieces. Instead, it emphasizes holistic, functional, and communicative tasks as the primary learning activities in designing the teaching syllabus. The notable interpretation for applying task-based in my Vietnamese EFL classrooms is extracted from Long's Interaction hypothesis in 1996. As hypothesized, students' negotiating ability together with the usage of communicating strategies can be improved for achieving mutual comprehension. Similarly, from the perspective of communicating competence agreed by Ellis (2003), Ellis (2018a), Ellis et al. (2020), Dinapoli (2000), and McCarthy and Carter (2001a), Task-based Language Teaching can engage students with English properly and naturally. Furthermore, Vygotsky's social cultural theory cited in Myers (2000) is also one of the significant foundations supporting the application of task based in EFL classrooms to maximize the students' verbal interaction during their actual task performance and their language acquisition. Consequently, tasks in TBLT have been integrated in this study. From such advantages, HOTS-based tasks in this study are designed through the combination of task-based principles and HOTS theories. This means students are required to complete the individual and group tasks to master 3 subskills of critical thinking (analyzing, evaluating, and creating) to develop their English Public Speaking performances in terms of English language and critical thinking skills.

2.3.3 Typical task features for designing HOTS-based tasks

According to TBLT proponents such as Ellis (2006); and Hashemi et al. (2012), Task-based approach has been one of effective instructional tools, emphasizing conveying meaning through active and purposeful language practice. Based on the supporting viewpoint of Kumaravadivelu, cited in Ellis (2000) and Richards and Rodgers (2001), Task-based approach necessitates a comprehensive work plan that is connected to real-world contexts to engage students in cognitive learning processes and achieve predetermined communicative objectives. From the potential of task-based, HOTS-based tasks applied in this study are designed with the following arguments.

Firstly, the most prominent feature of HOTS-based tasks in this study is focusing on meaning, which has been regarded by Ellis (2003) and Nunan (2004) as a significant distinguished feature of tasks against exercises. HOTS-based tasks are designed with gaps in terms of information, reasons, and opinions to engage students to practice the target language in meaningful contexts and convey their own meanings during their task performing process. Furthermore, as agreeing with ideas of Ellis (2003), Foster (1998), Richards and Rodgers (2001), HOTS-based tasks create opportunities for students to foster their mutually comprehensible communication by closely negotiating with others. As a result, students incidentally practice various linguistic structures (Ellis, 1997; 2003; Willis, 1996). In this context, HOTS-based tasks should provide specific content, while the linguistic forms may be determined flexibly by students, sometimes with the facilitation of teachers (Breen, 1989; Kumaravadivelu cited in Ellis, 2003; Richards & Rodgers, 2001).

Secondly, HOTS-based tasks are integral components of an instructional framework (Ellis, 2003). Essentially, as emphasized by Ellis (2003), a work plan not only outlines how tasks will be executed but also facilitates students and teachers for the completion of subsequent tasks. As a result, students are required to practice and contribute to the HOTS-based task operations in various flexible and unpredictable ways; therefore, the HOTS-based task completion process, as claimed by Breen (1989) and Ellis (2003), may match the intended work plan because task-as-work plan can predict and widely accept the students' various performances in their task-completion are widely appreciated and accepted for encouraging students' willingly expression of their distinct personal viewpoints with peers and lecturers.

Thirdly, the relation of HOTS-based tasks and the real world is another dramatical component of tasks, as defined by Ellis (2003) and Skehan (1996). This relation is essential in reflecting the relevant and authentic materials in classrooms.

Therefore, the prepared materials should aim for language teaching with detailed pedagogical requirements to maximize the instructional usefulness.

Fourthly, cognitive processing is an unavoidable feature of HOTS-based tasks. According to Ellis (2003, p.10), “students use cognitive skills such as selecting, classifying, ordering, reasoning, and evaluating information while accomplishing a given task”. These five cognitive steps reflect the students’ language choices in terms of language functions and language forms. However, these five thinking processes (Ellis, 2003) mainly focuses on comprehension and evaluation elements, which do not meet the 21st century skills when students are required to make persuasive explanations for innovative solutions or decisions. This has led to the argument that the thinking processes of analyzing, evaluating, and creating reflect HOTS-based tasks that support students’ development in both language skills and critical thinking.

Finally, HOTS-based tasks must also have clearly defined communicative outcomes as supported by Ellis (2000, 2003). This means, the specific goals of HOTS-based tasks as well as the expected communicative outcomes which students can achieve at the end of task completion should be defined in advance for greater involvement students into the assigned tasks (Willis, 1996). This means, teachers should inform students of the required skills which students must acquire at the end of the HOTS-based task with the detailed evaluation outcomes to increase their students’ comprehension towards the tasks’ usefulness, then to foster their students’ learning motivation and their effective task performances in terms of both physical involvement and cooperative work.

In this study, several key factors were considered when designing HOTS-based tasks to enhance students’ English Public Speaking performance and critical thinking skills. First, the tasks should integrate speaking practice with opportunities for critical thinking. Specifically, they should target Higher-Order Thinking Skills - analyzing, evaluating, and creating-as outlined in Bloom’s taxonomy (Anderson et al., 2001). Second, students should be encouraged to engage in meaningful interaction during task performance, and the tasks should present an appropriate level of challenge-not too easy to complete without effort. Third, effective HOTS-based tasks should be relevant to students’ interests and connected to current societal issues. This relevance helps foster positive attitudes toward learning, boost motivation, and improve both their English proficiency and critical thinking abilities.

2.3.4 Task’s components for designing HOTS-based tasks

The HOTS-based task components are explained in the following sections. According to Candlin (1987), he proposes a list of various components of tasks for

teachers' consideration that lecturers should apply HOTS-based tasks appropriately as regards the students' learning process needs. Furthermore, he claims that the input, lecturers and students' roles, learning setting, learning outcomes, actions and feedback are also the vital factors contributing to the meaning of HOTS-based task design. He argues for the significant functions of both lecturers and students that they must know exactly their roles for better HOTS-based tasks completion. Moreover, learning context should also be taken into consideration in HOTS-based task design because of the authentic situation choosing for meeting the task's objectives. The performance of various actions in logical order might be a good strategy for learning goal achievement. Especially, teachers should monitor and adapt the HOTS-based tasks better during the task development process for the later application.

Moreover, Nunan (1989), Brown (1998), Ellis (2008a), Nunan (2005), and Shavelson and Stern (1981) argue a set of necessary factors for planning task-based language teaching. Firstly, topics should be appropriate to the learning outcomes of specific subjects in the classes. Secondly, authentic input for students' usage should be provided during the task implementation. It should be provided under the format of written and visual data like letters, newspaper extracts, pictures, stories, seminar program, etc. at the starting time of the task either by teachers or textbooks. Thirdly, a set of HOTS activities conducted in the classes should be arranged in logical order with purposes for communicative practice and critical thinking improvement. Fourthly, the general comprehension of the task performance's objectives should be provided clearly. Fifthly, students are the center of the whole learning process; therefore, their learning demands, their interests, strong and weak points should be considered thoroughly before organizing HOTS-based tasks. Finally, the social community plays an extremely important role in HOTS-based task design because of the daily contact with different people and various communicative situations.

To achieve HOTS-based task's goals, it should be the combination of not only semantic and pragmatic as argued by Ellis (2009) but also the coherent and consistent factors for reflecting students' specific activities or actions together with the detailed information for what skills or capacities students can develop after implementing the tasks as well as the evaluation process satisfaction under the format of metacognition statements with "can" like "I can perform ... or I can present ... I can discuss about ..." etc. Additionally, as claimed by Ellis (2003) and Scarino and Liddicoat (2009), lecturers should play their roles as task managers for facilitating the language learning process of students. Rather the language skills improvement, lecturers should understand their students' personal characteristics, culture, linguistics, experiences,

beliefs, ethical values, learning motivation, and especially English proficiency levels. Lecturers should be the first group of people who understand thoroughly what their HOTS-based tasks are together with the specific objectives in the course context and the rationale for each task performance.

2.3.5 Principles for designing HOTS-based tasks

Some important principles for meaningful tasks design under the format of HOTS-based tasks are mentioned in the following sections.

2.3.5.1 Principles of meaningful tasks

Skehan (1996) claims that tasks can be designed with a certain level of complexity to develop both language knowledge and fluency. Specifically, tasks of TBLT syllabus should be sequenced appropriately based on the increasing difficulty level in the classrooms to guide the process of HOTS-based task sequence from applying, analyzing, evaluating, giving opinions, synthesizing to creating within the context of English Public Speaking for tertiary students. Moreover, the difficulty of HOTS-based tasks design depends on the other factors consisting of the students' previous experiences, their thinking ability, their English proficiency level in handling the written materials and expressing their personal viewpoints, as well as the degree of their lecturers' available support. All of the previous factors should be considered thoroughly for the balance to help students acquire not only language fluency and accuracy, but also their critical thinking.

2.3.5.2 Principles of authentic tasks

Students' learning demands and background are extremely necessary in authenticity of HOTS-based tasks which lecturers have to design their own tasks based on this factor. For TBLT classroom applications, lecturers usually have a short talk or a survey with their students about their needs. Furthermore, the designed HOTS-based tasks are expected to reflect their practical experience, their background knowledge, their thinking ability, and finally their higher English proficiency level. Especially, these main factors should be compatible with the real-world tasks statement of Richards and Rodgers (2014) to meet students' needs in English Public Speaking improvement. As a result, HOTS-based tasks are designed according to the students' needs analysis and the characteristics of pedagogical tasks as mentioned above. Furthermore, behavioral verbs stated by Anderson and Krathwohl (2001) are also used for the Public Speaking Course's outcome specification with the emphasis of HOTS-based discussion, oral presentation, self-reflection, and the available support from teacher.

2.3.5.3 Principles of HOTS-based tasks

Definitions of Higher-Order Thinking Skills include metacognitive, reflective, logical, critical, and creative thing (Anderson & Krathwohl, 2001; Kuswana, 2012; King et al., 2006). Those kinds of thinking are activated whenever students are involved in unfamiliar problems, uncertainties, difficult questions, or dilemmas. Students' high thinking skills are recognized when they can give explanations, make their own decisions, perform their own plays, solve their own problems together with their language performance. According to Thomas & Thorne (2009), HOTS boosts students' thinking to higher levels, not just simply restating the acquired facts. This means, students are required to make clear explanation for their exposed materials. From those stages, students completely can determine the right observation from wrong, can formulate the new judgement, and come up with the most appropriate decision. Consequently, students' critical thinking, analytic reasoning, and problem-solving skills will be improved.

In this study, HOTS elements in HOTS-based tasks are defined as the experience of high thinking level rather than primarily repeating the given information. With HOTS-based tasks, students are required to not only comprehend, but also make logical interpretations, and critically connect previous experiences to the specific public speaking topics. Subsequently, students must categorize the collected facts, analyze, compare, and rearrange them in more individually appropriate ways. Consequently, appropriate solutions for the given problems can be generated. Furthermore, students can also have change for their thinking process reflection, they can determine their strength and weak points for further improvement. HOTS-based tasks, in this study, are designed to stimulate students' active participation when they cannot only receive but produce, create personal ideas, and evaluate their whole learning progress as argued by Thomas & Thorne in 2009. As a result, students can acquire language skills, can improve critical thinking when they have gone through various stages of attention, memory, language acquisition, processing, organization, and high order thinking. Students are expected to actively get involved in various HOTS-based tasks to achieve the course's learning outcomes by going through the principal stages including information classifying, personal opinions expressing, problem solving, and the final product performing.

2.4 Various task types for designing HOTS-based tasks

Regarding task types in TBLT, there are various task types including jigsaw, information-gap, problem solving, decision-making and opinion exchange for teachers to choose and design, according to Pica et al., (1993) as cited in Richard and Rodgers (2001). Specifically, the tasks which support students for cooperatively or individually information construction are jigsaw. Information-gap tasks encourage students to share different text information within groups or individuals to perform a complete text. For Problem-solving tasks, teachers provide one problem and some essential information with clear instructions to direct students to figure out appropriate solutions via negotiation and discussion. Finally, teachers can also use Opinion exchange tasks to enhance discussions among students. Students in this case are expected to share their comprehension and individual opinions related to particular topics.

In terms of task types stated by Willis (1996), listing, ordering, comparing, solving problems, sharing individual experiences, and generating creative tasks are the other different kinds of tasks. As regards listing tasks, students attempt to generate a list of specific topics such as countries of Asia, regular vs. irregular verbs in English, some famous leaders throughout the world, etc. For accomplishment this task type, students are required to brainstorm, activate their personal prior knowledge and individual experiences as well as do more research for fact finding at the library. In terms of ordering and sorting tasks, students are asked to get through four processes ranking items or events logically, sequencing items chronologically based on the specifically individual criteria or standard, grouping the items and categorizing them appropriately. For comparing tasks, students are engaged in three distinct phases comprising (1) matching to catalogue specific points, (2) associating them, and (3) classifying similarities and differences. With respect to problem-solving tasks, students' intellectually cognitive reasoning capacities will be boosted for solutions as the output from the given problems. In case of sharing personal experience tasks, students are encouraged to converse on themselves or their own living experiences. Finally, students are required to generate their own imaginative projects with teamwork. They, for example, may produce short stories, pieces of artwork, videos, presentations, etc. As claimed by Willis (2004), creative projects are a combination of various task types as listing, sorting, ordering, comparing, evaluating, and solving problems.

Another theory of different categorization of tasks is Nunan's suggestion in 2001 with the comprehensive clarification of pedagogic and authentic tasks. Pedagogic tasks or communicative tasks assist the progress of language practice in the classrooms while real-world tasks or authentic tasks embrace the used language outside the classroom.

According to Long (1989) cited in Ellis (2003), tasks can be clarified into three main types based on their achievable outcomes such as (1) open task (divergent) vs. closed (convergent) task; (2) two-way task vs. one-way task; and (3) planned task vs. unplanned task. Firstly, open tasks are usually constructed loosely and targeted few specific goals. Opinion gap tasks embracing freely debating, discussing, and conversing tasks together with making reasonable choices or decisions are all considered as open tasks where students are not expected to achieve any innovative definitions (Ellis, 2003). Closed tasks, on the other hand, are ones designed with specific purposes for achievable end products in advance, and Information gap tasks are the illustrative examples of closed tasks. In the light of Long cited in Ellis (2003), some of the linguistic forms in closed task may be aimed at meeting the students' basic language demands determinedly, and students should motivate themselves to seek for varied language forms in more complicated task completion. According to Duff cited in Beglar & Hunt (2002) and Long cited in Ellis (2003) negotiations seem to be prompted effectively through closed tasks as compared to open tasks because of the usual negotiation avoidance and quick quit for any challenging tasks. Moreover, Ellis (2003) states that learning less language challenging for students to encounter in open tasks if they are allowed to choose the topic freely.

Secondly, one-way and two-way tasks like a speech vs. debate, are designed for fostering the exchange of information between one or two people corporately. In addition, as argued by Foster (1998) and Long cited in Ellis (2003), meaningful negotiation in two-way tasks tend to be promoted more efficiently than one-way tasks when students have to overcome the interaction difficulties during the discussion process. The third category is planned and unplanned tasks which are undoubtedly meaningful in defining the significant negotiation level students provide. In planned tasks, students always have time to prepare their oral content or written paper as in a debate. Such way boosts students' thinking, their organization mindset, and their meaningful negotiation abilities than the unplanned task. Furthermore, giving allotted time for students has been demonstrated by Foster and Skehan in 1996 as a positive influence on the students' language fluency, accuracy, and complexity. Recently, Ellis (2012) classifies tasks into input-based and output-based ones in accordance with its concentration of either comprehension or final production. An input-based task involves the input manipulation which students are necessary to process (Ellis, 2012), whereas output-based tasks substantially concern the students' oral or written productions (Ellis & Shintani, 2014).

In a nutshell, there are various types of tasks from the arguments of famous scholars from the past until now. In this study, the effectiveness of task application should be additionally evaluated by the extent of outcomes students can produce, the concreteness of used language, the cognitive skills devoted for task completion, the usage of complicated language, the authentic level of task respectively. In this study, the lecturer sometimes can make slight changes for the tasks provided in the original textbooks, the order of tasks arrangement, their class managing ways for better language class performance. Additionally, the characteristics of task-based language teaching should be taken as a supplement to stimulate more interesting starting points, to extend the activities appropriately, and to specify the activities' purposes clearly. Consequently, HOTS-base tasks are designed using the combination theories of Kanagy and Falodun (1993) as cited in Richard and Rodgers (2001), Nunan (2001), and Willis (1996) as presented in Table 2.5.

Table 2.5 Theories for designing HOTS-based tasks

Author	Theories for designing HOTS-based tasks
Kanagy and Falodun (1993) as cited in Richard and Rodgers (2001)	HOTS-based tasks are designed to create opportunities for students to exchange their individual viewpoints for both information and opinion gaps. Such tasks' objectives may encourage students' freedom in discussing and debating with persuasive evidence explanation.
Willis (1996)	The task types including listing, ordering, sharing individual experiences are deleted. The concentration is directed to comparing and creative tasks and the addition of evaluating tasks for matching HOTS' theory (analyzing, evaluating, and creating)
Nunan (2001)	HOTS-based tasks are designed in the form of closed pedagogic tasks with the consideration of the achievable purposes and authentic material preparation in advance for students. Moreover, two-way HOTS-based tasks are also considered for creating interaction challenging among the students during their discussion period.

2.4.1 Task procedure

Different authors such as Prabhu (1987), Estaire and Zanon (1994), Lee (2000), and Ellis (2003) among others have proposed a structure of tasks in the TBLT context with three aspects. They are pre-task, while-task, and post-task. These theories of task cycle are also combined in the following for HOTS-based task application in this study.

2.4.1.1 Pre-task

According to Ellis (2003), in the pre-task stage, teachers need to frame the activities and explain them in detail for students to establish topic schemata. Among the familiar pre-task options like playing a video or audio cassette, Willis (2004) states that there are also a variety of other options available for teachers during this stage. Agreeing with this viewpoint, in this study, the lecturer explains the designed HOTS-based tasks to prepare students, motivates them to do the tasks by telling them

in advance about the tasks' usefulness and purposes, how tasks are relevant to them, and classifies the tasks' outcome. In addition, having the same line with Ellis (2003) and Foster and Skehan (1996), the lecturer in this study also plans her own way of designing the better HOTS-based tasks for students and gives them appropriate pre-task time for increasing their tasks' engagement in terms of quantity and quality of language production and critical thinking skills because of their mental load decrease during their later tasks' performance.

2.4.1.2 While-task

In the while-task stage, students work individually or corporately in groups to achieve HOTS-based tasks' outcomes. For this stage, meaning exchange is remarkably preferred to forms. Students, during this stage, are encouraged to experience task risks, to experiment with the known or unknown target language forms, and to focus on their fluent aspect. As claimed by Willis, HOTS-based tasks application in this study stimulates the lecturer and students' interaction for supporting learners' target language deficiency identification and mistake correction. Moreover, students' language performances are recorded and played later to emphasize their meaning transferring and forms accuracy as stated by Ellis (2003). Furthermore, time allocation for students' task reports is also considered because reporting stage is vitally essential for students to perform a smooth transition from private to more public interaction, according to Willis (1996b).

2.4.1.3 Post-task

In the post-task stage, there are a variety of instructional options for lecturers' application in their classrooms. Willis (2004) names this stage as "language focus" where students' opportunities for analyzing and practicing target language can be boosted by teachers' explicit grammatical instruction. Moreover, Ellis (2003) points out that teachers should take the advantages of the post-task stage to focus on form via a series of activities including viewing students' errors, observing their consciousness-raising tasks, and noticing their task performances. The range of reviewed instructional options previously illustrated the extent to which lecturers can be active and creative in TBLT generally, and their HOTS-based tasks particularly. In this study, post-tasks which are the individual and group presentations with specific topics will be applied, according to Willis (1996), for assessing students' public speaking performances and their critical thinking capacity. Through the three steps of HOT-based tasks, dissimilar tasks with various materials can be used creatively and effectively as well based on the practical learning contexts and students' needs as the statement

of Willis (2004), “knowing a range of options is like having a wide repertoire of music. It is an advantage to have something for every occasion” (p. 39).

2.5 Public Speaking (PS)

2.5.1 Definitions of public speaking (PS)

As stated by Webster (2008), the term "public" originates from the English language which is etymologically rooted in Latin. Moreover, the word “public” has been defined as non-individual encompassing individuals associated with a nation or community. This term commonly appears in phrases such as public finance, public administration, public service, public transport, public relations, and public interest, etc. Additionally, "public" can denote a collective of individuals who are confronting an issue with diverse perspectives on potential solutions and engaging in discussions.

Speaking, according to Agustina et al. (2011), can be characterized as verbal communication activities. The term "speaking" originates from "speak," signifying the act of articulating or expressing diverse viewpoints. Speaking has gained significant prominence in human interactions when people consistently seek to express their opinions and emotions. Linguistically, speaking is defined as the ability to articulate sounds, words, and sentences to convey thoughts, ideas, or feelings (Agustina et al., 2011). Speaking to him is a complex process that involves aspects such as grammar, pronunciation, fluency, and vocabulary in various situations such as discussions, speeches, debates, or dialogues. Consequently, "speaking" emerges as a vital tool for human social interactions.

In this study, as described by Abella and Cutamora (2019), Public Speaking (PS) refers to the skill making use of language in terms of appropriate voice, suitable uttering words, background knowledge, and language production for making persuasive speech. Public speaking can be an impressive way of transferring impressive information interactively through words or phrases for constructing the persuasive meanings. Based on the definition of Abella and Cutamora (2019), in this study, PS refers to an introduction, bodies, and a conclusion with persuasive speeches on a particular topic for audience. It mainly focuses on students’ critical ability to transfer relevant information in terms of content and language in English.

2.5.2 Elements of Public Speaking (PS)

According to Zarefsky (2017), there are six elements of PS. The first element is the process of delivered communication from speakers to audience. The speakers’ main function is conveying specific messages to involve the listeners’ thoughts and feelings. Listeners are the second element, which is the recipient of the message sent

by the speakers. However, the public speech's successful levels strongly depend on the extent of the listeners' correct comprehension of the delivered message. Speaker is the main element in PS while the listeners play the role of decisive factor. This means, although speakers can speak fluently and dynamically, speech failure can be caused by the listeners.

In addition, the message or the content is transferred to listeners by the speakers' verbally and non-verbally. Language is verbal message, and non-verbal messages are the speakers' various facial expressions, different tones of voice, direct eye contact, attractive gestures, appropriate postures, and confident appearance. Ideally, such verbal and non-verbal messages should be facilitated, combined, and mutually supported by each other in balanced and persuasive ways. The third element is feedback. Feedback means the response of listeners verbally and non-verbally. The verbal feedback is usually transferred under the format of questions or comments. Popularly, the audience will give their personal feedback or questions until the end of the speakers' speeches or until the beginning of Question-and-Answer sessions.

Medium is the next element to be mentioned here. It is the means the speakers use to convey messages including voice, radio, television, public speech, and multimedia. Typically, in the PS classes, the medium primarily involves auditory and visual channels, such as gestures, facial expressions, and visual aids. Moreover, the situation or context represents the fifth element of PS, denoting the time and place where the communication process takes place. With different situations, the speakers must choose and adapt different ways of communicating. Time is also the vital factor determining how the audience responds to the speakers' speeches.

2.5.3 Types of Public Speaking (PS)

According to Zarefsky (2017), PS is a communication process which relies on the exchanged conversations and discussed knowledge in the events. The types of PS are as follows:

- a. Informative: this type of PS aims to reliver related information on specific issues or topics. The speakers in this kind of speech will conduct in-depth research in advance for the reliable collected information for presentation theme. Generally, the topics are usually the speakers' expertise areas or the listeners' concerned topics.
- b. Persuasive: Persuasive PS targets to persuade a group of people or individuals to trust something. That's challenging for the speakers, especially in religious or motivational seminars or new products introduction. In most cases, the speakers' knowledge must be better than

the audiences. Especially, the discussed content should not cause any hurt for anyone. This kind of PS is strongly emphasized in this study with HOTS-based tasks application as argued before.

- c. Impromptu: this is the last type in PS. There is not much difference compared to the other types of PS, except its preparation. It is usually the speech at the time of marriage, the opening and closing of ceremonies, etc. That should be a short speech to congratulate the happiness of the wedding, or to open and close the ceremonies without so much special preparation as mentioned early.

2.5.4 The Public Speaking Process (PSP)

It is claimed that PS is very difficult due to their weaknesses of thinking ability in reading and preparing the speech content, their low English competency, and their speech anxiety. However, PS can be learnt and mastered like any other skills with the steps suggested by Green (2013) as follows:

- **Step one:** Overcoming fears and anxieties: the speakers should not completely focus on how they will speak in front of the audience but the message transmission to listeners for inspiration or influence creation.
- **Step two:** Writing a speech: the message content should be clear and logical for the audience's comprehension and persuasion. Furthermore, the speakers must determine their purposes, figure out the main points sequentially later, construct the introduction – body – conclusion subsequently.
- **Step three:** Making the speech interesting: the speakers should tell stories instead of presenting a list of facts mechanically and use metaphors for attracting the audiences.
- **Step four:** Delivering a speech: during the speech, the speakers should talk slowly and clearly to transfer the message to listeners correctly. They should take advantage of the voice tone intelligently with appropriate speed to grasp the audience's attention.
- **Step five:** Mastering nonverbal communication: it is essential to realize that the speakers' appearance and body language like eye contact, postures and gestures significantly reflect their self-confidence and passion in their speech, especially their easily message transmission.
- **Step six:** Using visual aids to help the audience: PowerPoint is not the only visual aid in PS since the speakers can also use flip charts and videos,

etc. to engage the message with the listeners. However, noun phrases or verb phrases should be considered and explicit clearly when using PowerPoint slides.

- **Step seven:** Practice and preparing: the speakers must practice the speech seriously for their official presentation as well as figure out in advance some problems they might encounter during the delivery time and possible solutions.

From the previous mentioned steps, PS is demonstrated as a combined different and complicated aspects of communication process and preparation which not only involve conquering fears and anxieties, but also interesting topic choice, the requirement of verbal and non-verbal communication master, the good user of audio and visuals, and the well preparation. On the other hand, Smith and Buster (2014) outline nine stages for an effective PS as follows:

- **Step one:** general topic should be selected based on the speakers' individual interest or expertise fields.
- **Step two:** the topic should be focused together with their own interest and the audience's concern.
- **Step three:** specific purpose should be considered carefully.
- **Step four:** the speech should be organized in advance for saving materials searching time.
- **Step five:** materials related to topics should be searched and judged critically before being collected.
- **Step six:** presentation aids such as using charts, pictures or PowerPoint slides should be taken advantage in order to help listeners follow the content effectively.
- **Step seven:** speech notes should be created carefully to reflect the speakers' thoughts under the format of bullet points and phrases for easier ideas brainstorming and speech practicing later.
- **Step eight:** practice should be conducted regularly and seriously as well preparation for successful speeches and goals achievement.
- **Step nine:** the prepared speech is delivered officially in front of an audience.

In this study, the steps suggested by Smith and Bluster (2014) are preferred to those proposed by Green (2013) because the sequence of steps for the students' thinking ability improvement is more appropriate. Specifically, the secret to dealing

with the above steps for successful PS is the application of HOTS in the first six steps for the speech content and the hard work for speech delivery. The nine steps resented by Smith and Bluster (2014) have illustrated the appropriate sequence of thinking process from general stage of topic choice to specific goal identification and materials research. The previous steps also implicitly demonstrate the important role of HOTS in critically searching and judging activities for the collected materials before practicing and delivering the speech. Particularly, steps 1-4 are taken advantages for syllabus adjustment for students' critical thinking and PS performances improvement. Step 5 is the focus of this study when students are required to overcome the sequenced HOTS-based tasks (see the lesson plan) for preparing steps 6-9.

2.5.5 The benefits of Public Speaking for tertiary students

To the researcher, good PS will benefit tertiary students' personal, professional, and public lives. In terms of personal benefits, PS can benefit students in three ways. Firstly, PS can support students to be successful at universities and their further careers after graduation. Once undergraduates develop their linguistic skills, their thinking quality will be intellectually and socially empowered due to the inextricably connection between language and thought. The skills including researching, analyzing, re-organizing, wording critically, and confidently delivering will be practiced regularly for speeches delivery and support students' not only academic majored studies but also their career development in 21st century, according to Selman and Jaedun (2020) and Yulianti and Sulistyawati (2021). Secondly, tertiary students might be more knowledgeable with PS as the evidence of William Glasser (1998) that we learn 10 percent of what we read, 20 percent of what we hear, 30 percent of what we see, 50 percent of what we see and hear, 70 percent of what we discuss, 80 percent of what we experience, and 95 percent of what we teach others. Speaking generally is an active and useful process in engaging students with their idea discoveries and idea transmission with appropriate verbal and non-verbal language skills. Especially, PS is a complicated process which acquires students' great combination of competent English capacity, attractive non-verbal languages, and critical content preparation with persuasive evidence and explanation for good performances. The more PS practice students perform, the better thinking skills they can practice as Forster (1879) mentions that we could not know what he thinks until we've witnessed what he's said. Thirdly, confidence will be built up dramatically with PS. The students' confidence and poise can be gained as they begin mastering their PS course.

Regarding professional benefits, communication generally and PS particularly are essential for students' professional development. The relationship

between communication competence and career success has been demonstrated by numerous studies such as Avunduk and Ertekin, 2020 cited in Çakır, 2021. Therefore, students with good public speaking can collect better chances of securing employment and advancing their career.

Lastly, public benefits are one of the vital advantages of PS for tertiary students. They allow them to participate in democracy at its most basic levels in creating and sustaining a society. Learning PS helps students listen more carefully and critically whenever they receive speeches. Listening critically helps students understand the public dilemmas better, form significant and different viewpoints by themselves, and then figure out more effective solutions.

2.5.6 Public Speaking difficulties of Vietnamese tertiary students

There are many difficulties arisen when students speak in public. According to Kompas (2010), and Rayan & Shetty (2014), some typical PS constraints are mentioned as follows:

First, students usually devalue their capacity. Specifically, they tend to limit their existing talents in speaking publicly with some negative thoughts and beliefs on their English low competence. Secondly, lacking self-confidence regularly prevents students from releasing their potential when speaking in public. The absence of confidence when speaking English in front of an audience can be interpreted as the students' fear of making mistakes and then causing the unwillingness to express the messages later (Bashir et al., 2011; Woodrow, 2006). Not mastering audience is the third constraint for students in PS. Most of them feel intimidated. They always focus on their wrong speeches, the mistakes they have just made and the negative feelings wandering in their minds.

Fourthly, Next, fear and anxiety emerge as common obstacles for students in PS. Their fear ranges from moderate stress to extreme nervousness, while anxiety tends to be more intense. Additionally, many students report their sleep disturbance experience the night before their presentations due to the anxious thoughts of delivering speeches. The fifth constraint is the students' linguistic problems. According to Horwitz et al. (1986) as cited in Wahyuni et al. (2013); and Rayan and Shetty (2014), students usually encounter different difficulties with vocabulary and grammar. Vocabulary serves as the fundamental building block of language, enhancing its richness and meaning. When students lack sufficient vocabulary (Adayleh, 2013; Biber & Barbieri, 2007), they struggle to effectively convey their oral messages or articulate ideas and understand others' meanings. Besides, for grammar, it is a stumbling block in students' English PS (Latha, 2012; Zhengdong, 2012). Grammatical competence can

help public speakers apply the English structures appropriately and correctly; however, grammatical mistakes caused by the deficient grammatical structures might change the meaning of utterances the speakers want to deliver (Mahripah, 2014). Sixthly, students in EFL context generally and in Vietnam particularly lack English speaking environment for their English acquisition and practice in daily lives. This problem leads to the shyness and embarrassment from students towards their speaking opportunities in classes when English oral practices only represent about 5% of their daily class time for a typical English classroom (Tuan & Mai, 2015).

Finally, based on the results collected from the survey for students' opinions on their EPS skills, they claimed for their weak thinking ability for their material preparation in PS when most of them can only comprehend the written materials and transfer nearly the same into their speeches without critical judgment for the systematic, logical, and persuasive content. In this case, being ready with the delivered material implicated in the message is extremely important for the students; however, they lack analyzing, evaluating, and creating thinking skills for judging their collected materials critically. As a result, their delivered message is unsystematic, nonlogical, and noncoherent. Furthermore, lack of practical experiences, personal background knowledge, the capacity of society and education are also the factors causing negative influences on their PS ability. Although lacking evidence showing the actual difficulties of Vietnamese tertiary students in PS classes, the previously mentioned constraints are also their practical facing issues which have been considered thoroughly by the researcher in designing HOTS-based tasks for supporting tertiary students to overcome such barriers, to develop their public speaking performances and their critical thinking skills.

2.6 Previous studies

Some related studies have been found and analyzed in this part for a general overview of HOTS application for students' English skills and critical thinking improvement. Particularly, HOTS application will be analyzed in both strengths and weaknesses for better application in this study.

2.6.1 HOTS for teaching English reading skills

In terms of the application of HOTS for teaching English reading skills, in order to identify whether students' reading comprehension ability could be improved or not after the implementation of HOTS, a quasi-experimental study, titled "The implementation of Higher-Order Thinking Skills (HOTS) in learning reading for EFL learners" was conducted by Nurmaharaeni and his colleagues in 2020 with 23 students

from class VIIIC and 22 students from class VIIIB. The data obtained from pretest and posttest were analyzed and demonstrated that the reading comprehension ability of students in experimental group increased to 32.43%, which was nearly 5 times higher than that's of students in control group, 4.9%. The findings claimed that HOTS caused positive influences on students' reading comprehension when students know how to raise related questions for making inference and answering them later during their English reading learning process. Furthermore, students could predict the given questions and provide logical reasons and arguments related to texts or learning materials later. Although HOTS improves its important role in enhancing students' reading comprehension and argument ability, HOTS integration in the experimental group should be explained in detail for application.

2.6.2 HOTS in teaching English writing skills

With respect to HOTS in teaching English writing skills, the study titled "ESL teachers' strategies to foster Higher-Order Thinking Skills to teach writing", was carried out by Singh et al. (2020) to foster ESL students' HOTS and their English writing skill. The samples for this qualitative research were 4 ESL teachers from two Malaysian secondary schools. The results, which were illustrated via the classroom observation and video recordings, showed that with the appropriate procedure of the combination of I-thinking Maps, real-life situations inference, and graphic organizers for problem-solving skills practice in classes, teachers could help students perceive the general concepts of HOTS, which subsequently assisted students to connect with their writing concepts better.

Subsequently, to discover the factors influencing students' low English proficiency and to understand teachers' viewpoint on the implementation of HOTS in their students' English mastery, Bahrudin and his colleagues carried out a study, titled "The improvement of students speaking skill by using Higher-Order Thinking Skills (HOTS) method with MA students in 2020 as a response to Indonesia's 2013 curriculum revision. The qualitative data were collected from observation, interview, questionnaire, and documentation and analyzed. The results presented that the typical factors affecting their English-speaking skills were their attitudes, learning motivation, and especially lack of supervision of their learning outcomes. The study illustrated the effective implementation of HOTS method on students' English-speaking mastery. Although the researchers argued for their HOTS method utilization as the revised Bloom's taxonomy by Anderson and Krathwohl (2001) with the mainly emphasis of three thinking levels including analyzing, evaluating, and creating,

additional information relating to HOTS method should be added before extracting the results.

2.6.3 HOTS in teaching English listening skills

For the implementation of HOTS-based questions in enhancing students' English listening skills, Faravani and Taleb (2020) conducted a study for investigating the influence of HOTS question technique performance on the improvement of intermediate EFL students' listening comprehension and critical thinking. 40 Iranian participants from 4 chosen classes in Kish Air Language institute, Mashhad were invited, then divided into either control or experimental groups, and received different teaching technique. After finishing the TOEFL listening comprehension tests as pre- and post- tests and California Critical Thinking Skill Test, students receiving HOTS questions based on Bloom's Taxonomy within 12 sessions could improve their listening comprehension and critical thinking skills significantly as compared to the students in control group. However, the HOTS-integrated questions used in Experimental group should be modified to focus more on specific sub-skills including analyzing, evaluating, and creating. Additionally, the mixed questions should be arranged in sequence instead of randomly for students' more effective higher thinking improvement.

In the same vein, another study on HOTS implementation strategies through applying, analyzing, evaluating, and creating was executed for addressing the gaps of HOTS studies in teaching English listening and speaking skills in a Malaysian Primary School. Aziz and his colleagues carried out this study as a response for the Malaysia Education Blueprint (MEB) 2013-2025 for the country's educational quality improvement. The qualitative data were collected from direct classroom observation, semi-structured interviews with six respondents chosen from three different Integrated Primary Religious Schools after the application of Anderson and Krathwohl Bloom's Taxonomy Theory Revised (2001) and Robert Glaser's Teaching Model (1962) in classroom. The results illustrated that students' English listening and speaking skills could be fostered with appropriate implementation of HOTS strategies by teachers in classrooms. HOTS strategies in this study are HOTS-based questions which are raised by the teachers for boosting students' Higher - Order Thinking Skills. However, there were some overlaps in the presented questions for analyzing, evaluating, and creating. Additionally, the listing content of many different levels of HOTS from Curriculum Development Division (2014) and Mortaji (2022) should be aligned with a specific framework to ensure clearer interpretations of HOTS application.

2.6.4 HOTS in teaching English speaking skills

Relating to teaching English speaking skills, firstly, Chen (2016) suggested an innovative framework in order to boost students' HOTS and their L2 speaking as a reflection step towards the highlight of HOTS in L2 education. This research demonstrated that effective HOTS-based questions caused positive influences on students' L2 speaking and their cognitive development. However, she argued that the effects of HOTS-based questions would be limited by the questions created themselves and teachers' support in classrooms. For overcoming the students' problems of eliciting non- and restricted responses, she applied the framework of meta-design and micro-design. These frameworks illustrated its meaningfulness in supporting students by equipping students with better discussion skills in social contexts and proactively higher cognition. The validity of her frameworks as demonstrated via her experiment before figuring out pedagogical implications and the further suggestions for framework application.

Especially, to understand "Students' perspective and problems in implementing Higher - Order Thinking Skills (HOTS) in speaking for presentation class", Syafryadin and his colleagues implemented a mixed-methods study in 2020 with 30 students from the English Education Study Program in a State University in Bengkulu, Indonesia. The results from the questionnaire and interview demonstrated that most students expressed their positive perception towards the HOTS implementation in Speaking class because they believed that HOTS could train their critical, creative, and innovative thinking skills via the constant encountering several difficulties such as unpersuasive argument, nervous feeling for nothing to say, and lack of vocabulary, grammar and background knowledge. Especially, not all students could improve their analyzing skills after HOTS treatment. Information on how HOTS are integrated into the treatment should be added compatibly with the data collection procedure. In summary, this study was conducted to understand the students' perceptions towards HOTS application in Public Speaking class as well as their difficulties during HOTS experience time via the data collected from questionnaire and interview without clear interpretation for HOTS application in the PS class. This is the only article that can be found for the related study direction with these key words (HOTS application, incorporation, integration for PS skills enhancement, improvement, development, and critical thinking improvement). It is claimed that only a few studies focus on this aspect, the application of HOTS for fostering EFL tertiary students' English PS and their critical thinking skill.

From some previous studies demonstrating the implementation of HOTS in teaching English listening, reading, writing, and speaking skills, it is discovered that HOTS has been an attractive academic term in the 21st century especially in Indonesia and Malaysia when those two nations have extremely highlighted the HOTS integration in teaching English textbooks and teaching methodologies in order to qualify their education systems. However, only some studies among many others have executed clear theories on HOTS as well as the effectiveness demonstration of different ways HOTS-related questions for fostering primary and high school and tertiary students' English listening and reading skills (Aziz et al., 2020; Nurmaharaeni et al., 2022) and the students' interrelationship between HOTS integration and their critical thinking capacity (Faravani & Taleb, 2020; Srinawati & Khasyar, 2020). Furthermore, although some studies have been found for the effective demonstration of HOT instruction in English Speaking and PS contexts such as Bahrudin et al. (2020), Purnama and Nurdianingsih (2019), and Syafryadin et al. (2020), limited information on HOTS treatment was explained in detail for students in experimental groups. Especially, lack studies highlight the incorporation of HOTS and TBLT for designing HOTS-based tasks to improve EFL tertiary students' English PS and CT with the argument of task design as compared to the other studies mainly concentrating on the application of presentation task or debating task only (Berkelaar et al., 2019; Burhanuddin, 2021; Iberri-Shea, 2019; Yulianti & Sulistyawati, 2021).

2.7 Conceptual framework

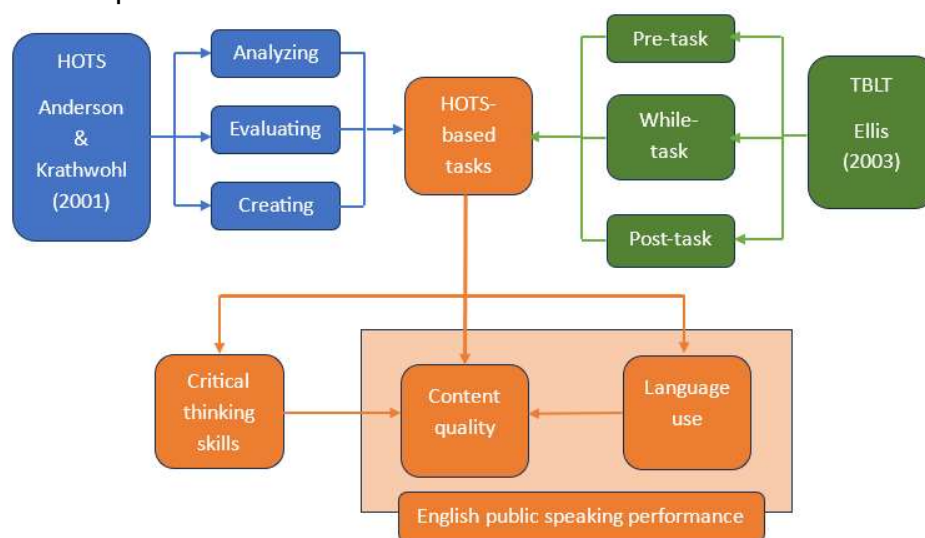


Figure 2.1 Conceptual framework of this study

In Figure 1, the study's theory is rooted in a combination of Anderson and Krathwohl's Higher-Order Thinking Skills theory (2001) focusing on analyzing, evaluating, and creating, and Task-Based Language Teaching approach (Ellis, 2003) encompassing pre-task, while-task, and post-task activities within the context of English Public Speaking. The tasks based on Higher-Order Thinking Skills primarily center around while-tasks, designed to positively impact students' critical thinking skills, content quality, and language use.

In summary, Chapter 2 delves into the extensive literature on Higher-Order Thinking Skills (HOTS), Critical Thinking (CT), and Task-Based Language Teaching (TBLT) in the context of English Public Speaking courses. The chapter has examined the foundational concepts of HOTS and CT in Vietnamese language education, emphasizing their pivotal role in nurturing students' capabilities to analyze, evaluate, and create. Additionally, it has explored the principles and frameworks of TBLT, underscoring its effectiveness in fostering active learning and communicative competence via task procedure. The intersection of HOTS and CT is critically analyzed, centering on the potential of TBLT to cultivate critical thinking in PS. While existing studies spotlight the advantages of integrating HOTS, the review also uncovers substantial research gaps, particularly in relation to their practical application in English Public Speaking courses. These gaps form the underlying rationale for the current study, which seeks to uncover the potential of critical thinking and TBLT in elevating the practice of persuasive oral presentations.