

Incorporating Critical Thinking Skills Development Into Maritime English Class

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ABSTRACT

Keywords: critical thinking; four language skills; language activities; maritime English.

The concept of Critical Thinking is increasingly emphasized in education and language teaching, including in Maritime English classes. Developing critical thinking skills in English learning is essential for improving students' language competencies. In traditional classrooms, passive learners rely entirely on teachers for information, limiting opportunities for engagement and independent thinking. This paper explores the integration of critical thinking skills in Maritime English instruction, considering the importance of active learning methods for maritime students who are being prepared for global careers. This study employs a qualitative descriptive method to examine the implementation of critical thinking strategies in Maritime English classes. Data is collected through documentation techniques, analyzing existing written materials, images, and other relevant resources. The collected data is then processed through three stages: data reduction (filtering and organizing essential information), data display (presenting structured findings), and conclusion drawing (identifying key insights). Triangulation of sources and methods is applied to ensure data validity. The findings indicate that incorporating critical thinking into Maritime English teaching enhances students' engagement and independent learning. However, challenges such as crowded curricula, limited class time, and large student numbers can hinder the development of critical thinking skills. To overcome these obstacles, this study suggests adopting structured activities that encourage critical thinking while integrating diverse teaching methods. The six components of critical thinking should be actively applied in classroom settings to maximize learning outcomes. Future research is encouraged to explore critical thinking in other English for Specific Purposes (ESP) fields, such as English for Nursing, Business, and Aviation.



Introduction

In the teaching and learning process, a teacher must find the best method to apply in the classroom. The learning process in the classroom must be interesting and make students more active in the classroom (O'Reilly et al., 2022). Not only do they sit and listen to what the teacher says in class without contributing to the teaching and learning process in the classroom, but they should have more opportunities to get more exposure

and language practice. It will involve students talking to other students to exchange information communicatively and critically (Thornhill-Miller et al., 2023).

In higher education in Indonesia today, many lecturers feel that University of Indonesia students do not use their critical thinking skills enough when they are working on oral and written assignments. They tend to passively accept what their lecturers give them without analyzing them properly (Liang & Fung, 2021). Perhaps it is because of the learner-centered approach to learning English when they are in high school and are not used to developing students' critical thinking skills (Moniz et al., 2021) Argue that the main goal of further education is to improve students' thinking.

Unfortunately, the way teachers teach English is still teacher-centered and does not explore students' critical thinking (Anggraeni et al., 2023). The solution to that problem is that we as teachers must allow students to speak and ask questions. Therefore, we will give them the reinforcement to apply their critical thinking skills (Bellaera et al., 2021).

Maritime English has been officially adopted by the International Maritime Organization (IMO) as the standard language for communication at sea. According to the STCW 95 Convention (Standards of Training, Certification, and Watchkeeping for Seafarers), all seafarers must demonstrate proficiency in Maritime English (Mikulicic et al., 2023). This requirement ensures that they can effectively communicate in various maritime operations, contributing to the safety and efficiency of global shipping. Miscommunication at sea can lead to serious accidents, making language proficiency a crucial aspect of maritime safety (Farjami, n.d.).

To meet these standards, Maritime English instructors play a key role in equipping students with the necessary language skills. They must carefully select the most effective teaching techniques to develop students' proficiency in listening, speaking, reading, and writing (Saray et al., 2021). These skills are essential for seafarers to navigate safely, respond to emergencies, and collaborate with multinational crews. A strong foundation in Maritime English prepares them for real-life situations where clear and accurate communication is required (Khosiyono, 2021).

Most Maritime Institutions recognize that mastering English communication is critical, as it directly affects safety at sea. Effective communication can help prevent accidents, ensure smooth navigation, and facilitate quick decision-making in emergencies (Tenieshvili, 2021). Additionally, as global trade and economic activities continue to grow, more seafarers are joining international shipping routes. This expansion increases the need for a universal language that enables seamless coordination among maritime professionals from different countries.

In their daily duties, seafarers frequently interact with English-language materials. They need to read navigation publications, such as manuals, safety regulations, and operational guidelines. They also rely on radio broadcasts, including weather forecasts, emergency alerts, and VHF communication with other vessels and port authorities. Moreover, English is used for day-to-day communication with multinational crews, ensuring smooth operations on board.

Thus, Maritime English is a fundamental skill for seafarers, essential for both safety and operational efficiency. The ability to communicate effectively in English helps prevent misunderstandings, enhances teamwork, and ensures compliance with international maritime regulations. As global shipping continues to expand, the demand for proficient Maritime English speakers will remain a priority in the maritime industry.

Method

This study employs a qualitative descriptive method. Qualitative descriptive research aims to describe or illustrate phenomena in depth based on data collected in the form of words, narratives, or images rather than numbers. This method is used to understand the meanings, experiences, or perspectives of individuals or groups within a specific context (Thompson Burdine et al., 2021). The data collection technique uses the documentation method. This technique is a research method used to collect data from existing documents. These documents may include written texts, images, or other monumental works that hold informational value for the research (Jailani, 2023). Once the data is obtained, data analysis is conducted through three stages: data reduction, data display, and conclusion drawing. In the first stage, data reduction, the collected information is filtered and organized to eliminate irrelevant data, ensuring that only significant information is retained for further analysis. Next, in the data display stage, the filtered data is presented in a structured format, such as tables, graphs, or thematic narratives, to facilitate understanding and interpretation. Finally, in the conclusion drawing stage, the analysis results are compared with the research objectives to identify key patterns and findings that provide comprehensive insights into the effectiveness of the Hexahelix model in supporting the development of sustainable wildlife-friendly indigenous village tourism while integrating local wisdom into its management practices. Data validation is carried out through source and method triangulation to ensure the accuracy of the research findings (Fadilla & Wulandari, 2023); (Maharana et al., 2022).

Results and Discussion

Maritime English

According to the Encyclopedia of Applied (Gorter, 2013), Maritime English is a general term that refers to the English language used by seafarers both at sea and in ports and by individuals working in the shipping and shipbuilding industries. Considering the importance of English in global communication in the maritime world, the IMO has officially adopted maritime English as the language of the maritime industry (Bullock & Westbrook, 2021). Maritime English is a sub-set of English for information exchange and knowledge transfer that will be used as a working language in the maritime world. Maritime English can be considered as one of the categories within ESP (English for Special Purposes), and its purpose is to provide English to Seafarers (Vidhiasi & Syihabuddin, 2022).

Related to that fact, Maritime English teachers must complete material in English language teaching that meets the requirements of the convention through relevant syllabus, classroom materials, and effective teaching techniques and methods for the development of language competencies in Maritime English necessary for further academic and professional growth (Ahmmmed, 2021).

What Are Critical Thinking Skills?

Critical Thinking has been an established subject and a debatable field of research across disciplines for a long time. Most teachers may be impressed to know that critical thinking has been used centuries ago. (Sutiani et al., 2021). It has been implemented by Socrates. Socrates' views on critical thinking, supported by Plato, were later applied by Descartes and became the theme of essays, written by Montesquieu and John Locke. (Hui & Ishak, 2022).

Fisher (2001) describes critical thinking as "a type of thought that is evaluated, which involves criticism and creative thinking and which is specifically concerned with the quality of reasoning and arguments presented in support of a belief or action" (p. 13) (Aktoprak & Hursen, 2022).

In 1956, an educator committee chaired by educational psychologist Benjamin Bloom worked to develop a system of thought that would go beyond traditional rote learning in education and encourage 'higher-order' thinking. (Atta et al., 2024). The following is a summary of this more recent effort to provide a set of subskills that take learners from lower-level thinking to higher-level thinking:

1. Understand

This is a very basic step. For example, when we read or listen to a text, we will immediately try to understand the main idea of the text. In our first or native language, this is not a difficult thing, but if the text is in a foreign language we have to try harder to understand the text. The teacher may have to ask some questions to the students such as; "What kind of text is that? Where do you find such text? What's the message of that text?"

2. Apply

After reading the text, we found some new information from the text. In class, it's like we have to answer some questions based on the given text, filling out a table related to the facts of the text that we have read. In short, it is about completing the text with new information that we gather from the text we already understand.

3. Analyze

The analysis stage encourages us to find supporting evidence that supports the main idea. In addition, we also identify how the text is constructed by the author. At this stage, students will be more critical of the text and not just look at the text as it is.

4. Evaluate

This stage requires the highest critical thinking skills of the student. This is the stage where students need to let the author's opinion go and try to make their perception of the text. If they want to use textual information in their text, they must identify whether or not the information from the text is valid and relevant. This stage may be considered the most complex stage for students (Butler, 2024).

5. Create

After learning the four stages, then students need to apply their knowledge to create their texts. They can create new texts both individually and in group assignments. Their new text should consist of their expressions or opinions based on the text they have read. They can add some new information and evidence based on their research. After doing

this, they can present the text in front of the class and get feedback from other groups (Han, 2022).

Incorporating Critical Thinking Skills in Language Teaching

Connecting critical thinking skills and language teaching means that we, as teachers should encourage students to be active and creative to apply the language material they get not only in the classroom but also in the real world. Through several activities in the classroom, they activate their knowledge and communicative skills, so that they can engage in the learning process. (Lee & Hwang, 2022).

We can teach language without critical thinking elements, for example, we teach vocabulary only by using the listen-and-repeat technique. However, when students face the obligation to perform tasks using the target language that contains instructions to personalize, investigate, report, and solve problems, then they must think critically using vocabulary to perform the task. (Hazaymeh, 2021).

The authenticity of the material is a key factor in making the material suitable for promoting critical thinking in language learning. (Yuan et al., 2022). The reason for this is that learners can see some meaning in the material that gives them the encouragement and motivation to talk about it. The type of material should also provide learners with a level of understanding of the relationship between the material being taught and the real world.

To support that, realia based on maritime English in the classroom should be used, e.g. talks, original documents or charts, report forms, etc. Thus students can become more interested in reading. Gradually, comprehensive reading will broaden students' horizons, and enlarge students' vocabulary. In such a way students can gain knowledge about documents. (Tominac Coslovich, 2021).

The classroom atmosphere must support the language teaching process. The classroom setting allows students to work closely with partners. The focus should be on the students, not the teachers. So, the arrangement of desks in the classroom should be in grouped groups. Since the focus is on the student, therefore students share responsibility for the classroom environment with cooperative learning techniques, group or class discussions, and project-based learning.

There are several activities that encourage students' critical thinking skills such as debate, media analysis, and problem-solving. This kind of activity will lead students to contribute their interest and involvement, therefore we, as teachers, need to know what issues are relevant to their lives. Students will respond better when they know teachers are interested in their lives.

Applying Critical Thinking Skills in Maritime English Classes

1. Ideas that come up

- 1) Give students some pictures of the accident on the boat. The images could be taken from newspapers or the internet. Let students look at the pictures and look at them in depth.
- 2) Ask students what the pictures are about (Let students speak freely at this stage)
- 3) Dictating keywords from reading text

The purpose of this stage is to introduce the topic of Accidents on Ships to students and provide an opportunity to express their ideas openly. This is expected to be an initial opportunity for students to activate the thinking process and encourage them to convey ideas critically. By dictating keywords, teachers indirectly encourage students to more easily relate to characters and actions in the text later.

2. Highlight lexis and its meaning/vocabulary

- 1) Check the dictated words (ask them to swap their jobs with their partner first)
- 2) Check the meaning of any words that may cause difficulties.

The goal of this stage is to focus on the meaning of the keywords to prepare students for the next prediction task.

3. Give the caption of the text.

After providing an overview of the accident on the ship, the lecturer gave the title of the text. It could be a newspaper headline. After that let students elaborate their minds to think and predict the text by connecting the titles and dictated words they have.

4. Predict text.

At this stage, students are asked to create small groups and ask them to predict the text based on the given title and keywords. Each group was encouraged to tell what the predictions were about the text, the other group might ask questions or criticize others.

5. The students read.

At this stage, students begin to read. Allow enough time to complete the reading section.

6. Ask questions about readings.

First, ask the students a focus question again. In addition to the focus questions, ask students a few other questions about the reading. If students can't answer the questions, allow them to read the passage again.

7. Follow up with tasks and/or activities.

After the reading process is complete. Continue with assignments and activities that will help students analyze concepts for a deeper understanding of ideas and organize information for later retrieval.

Speak

Topic: Recreation on Boats

The teacher gives a "Warm-up Activity" such as asking students "What are your hobbies?/What do you do in your free time? Teachers can provide a video about the dialogue "Talking about hobbies" from YouTube to describe the topic to students. Create opportunities for students to talk about things that interest them. This will show them that you are interested in what they are talking about. This is very important because it will increase their confidence to be more active in speaking. Therefore, spontaneous and authentic communication will be developed.

Actual topics such as new movies or novels can be discussed as group work. The group creates a free dialogue related to the film or novel that must be presented in front

of the class. They will discuss which movie or novel is better and convey the reason. In this presentation session, the students are not criticized for their ideas so students will be open to sharing new ideas. Debate is one of the techniques that can be applied. Debate forces students to think about different sides of an issue and also forces them to interact not only with the details of a given topic but also with each other.

Listen

Supporting (Pezzulo et al., 2024) Who underline that listening is an active process that includes receiving, interpreting, evaluating, and responding to messages, it should be noted that it also includes the ability to remember information and use it to communicate. Listeners are required to be able to analyze and critically understand the interlocutor's intentions. Furthermore, developing students' ability to critically evaluate will improve their listening skills.

The listening task should be relevant. If students listen to something they can relate to and might help them in their daily lives, this will help keep their motivation high. If the text does not attract special interest, there will be a tendency for students to shut themselves down. In this example, students learn about Injuries on an Airplane. As a cadet, they must know what injuries can occur on the ship. So, this topic is very important to them.

Example Topic: Injuries/Accidents on Planes

The students were asked to watch a video on YouTube about the injuries on the plane. They were also given worksheets with questions related to the video. The video is played 2-3 times. After that, they had to discuss with their group to solve the question. They share their answers with other groups and criticize each other. Teachers should let the discussion flow without immediately correcting their mistakes.

Writing

Mastering writing skills is often challenging for cadets, yet these skills are essential for them to become competent sailors. Effective maritime communication relies heavily on written documents such as business letters, notices, and sea protest notes. To enhance their writing abilities, cadets should be exposed to well-structured writing models and given tasks that help them practice writing in a maritime context.

One effective approach is to provide students with real examples (realia) of business letters, notices, and sea protest records collected from shipping companies. By analyzing these documents, students can identify their strengths and weaknesses, helping them understand what constitutes effective writing. Over time, this method enables cadets to develop proper writing techniques. This instructional approach aligns with the Content-Based Instruction (CBI) method, which integrates language learning with subject-specific content.

Content-Based Teaching Methods in writing instruction can also enhance students' critical thinking skills (Tuxtayevich et al., 2024). Research suggests that people acquire a second language more successfully when the information they engage with is relevant, interesting, and aligned with their goals.

For instance, in a writing exercise focused on creating an in-flight accident report, students first read a Marine Accident Report. After analyzing the report, they are tasked with filling out a structured report form based on the details they have read. This exercise not only helps students understand the format and content of accident reports but also familiarizes them with technical English terms used in maritime reporting.

Furthermore, students can compare and discuss their reports with peers in interactive group discussions. This collaborative approach fosters language fluency, critical thinking, and confidence in writing. By engaging with authentic materials and real-world writing tasks, cadets develop the necessary skills to communicate effectively in the maritime industry.

Conclusion

Incorporating critical thinking in language teaching is a challenge that teachers must experience to provide a quality learning experience to their students. This is also a challenge for students to know, not only memorize what they get in class, but later they will continue to learn independently. An important element to keep in mind is that critical thinking cannot be developed overnight, it is a process and thus there are many steps to take. There are several obstacles such as a crowded curriculum, short class time, and too many students in each class. We understand this, therefore we try our best to provide them with the right activities and materials that encourage their critical thinking and also combine them with other teaching methods.

The use of critical thinking in its six components is expected to be implemented in the classroom. It is then suggested that future researchers conduct research on critical thinking in teaching English to other English subjects for Specific Purposes, such as English for Nursing, English for Business, English for the Aviation World, etc.

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