UNDERSTANDING THE CHALLENGES OF MARITIME ENGLISH TERMINOLOGIES AMONG INDONESIAN CADETS

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Abstract. This paper provides a comprehensive analysis of the multifaceted challenges Indonesian maritime cadets face in mastering Maritime English (ME) terminologies. It aims to synthesize the linguistic, psychological, and pedagogical barriers contributing to the persistent gap between international proficiency standards and cadet performance, and to evaluate evidence-based interventions. A qualitative literature review was conducted, synthesizing findings from peer-reviewed research published since 2019, with a focus on Indonesian Maritime Education and Training (MET) institutions. The findings reveal a complex, interconnected system of challenges. Cadets' difficulties are rooted in foundational linguistic deficiencies, particularly in vocabulary and pronunciation, which are significantly exacerbated by predictable first-language (L1) interference from Bahasa Indonesia. These struggles fuel a debilitating psychological cycle of communication apprehension and low confidence. This cycle is perpetuated by a pedagogical ecosystem often characterized by a "curriculum-reality chasm," outdated teaching methods, and a lack of qualified instructors. Conversely, the review identifies significant positive outcomes from implementing Task-Based Language Teaching (TBLT) and high-fidelity simulator-based training, which effectively bridge the gap between classroom theory and professional practice. This study contributes a holistic framework that connects these disparate challenges into a coherent system, providing actionable recommendations for key stakeholders. The paper's novelty lies in its synthesis of recent, context-specific research to inform a targeted strategy for closing the ME proficiency gap, ultimately enhancing the safety and global competitiveness of Indonesian seafarers.

Keywords: Maritime English, Indonesian Cadets, Linguistic Interference, Task-Based Language Teaching, Standard Marine Communication Phrases

1. INTRODUCTION

The modern maritime industry is an inherently globalized domain, characterized by vessels traversing international waters and staffed by crews from a vast array of linguistic and cultural backgrounds (Đurović & Vukičević, 2022; Tchkonia, 2019). In such an environment, a common language is a fundamental prerequisite for operational integrity and safety. Maritime English (ME) serves this function, acting as the designated lingua franca at sea (Gabedava & Hu, 2025; Saunders, 2020). It is a specialized form of communication designed to ensure clarity and efficiency in all interactions, from routine navigation to critical emergency responses (Sirbu & Alibec, 2023; Barus & Simanjuntak, 2023).

The consequences of ineffective communication are severe. Research indicates that 70% to 80% of maritime accidents are attributable to human error, with miscommunication being a significant contributing factor (Budiwaty, 2023; Mujiyanto et al., 2023). In response to this clear danger, the International Maritime Organization (IMO) developed the Standard Marine Communication Phrases (SMCP) (IMO, 2001). The SMCP provides a standardized, unambiguous lexicon for all major safety-related communications, built on a simplified version of ME to minimize misunderstanding (IMO, 2001; Sari & Dewi, 2023). Crucially, under the STCW Convention, proficiency in the SMCP is mandatory for the certification of key officers, solidifying its status as a legal requirement for professional practice (Mujiyanto et al., 2023; IMO, 2001).

Despite these unambiguous international standards, a persistent and concerning gap exists between required ME proficiency levels and the actual performance of many Indonesian maritime cadets (Dirgayasa, 2022). This proficiency gap represents a critical vulnerability for both operational safety and the global competitiveness of the Indonesian maritime workforce (Budiwaty, 2023; Riyanto et al., 2023). Therefore, this paper aims to conduct an exhaustive investigation into the multifaceted challenges—linguistic, psychological, and pedagogical—that underpin this persistent proficiency gap among Indonesian cadets, with the ultimate goal of informing evidence-based solutions.

While individual studies have examined specific challenges such as linguistic interference (Syarif, 2019), psychological barriers (Dewi et al., 2021), or pedagogical shortcomings (Rakkus & Darmawan, 2022) in the Indonesian context, a holistic analysis that integrates these factors into a cohesive system is lacking. The novelty of this paper lies in its synthesis of a broad range of recent, context-specific research to construct a comprehensive taxonomy of these interconnected challenges. It moves beyond problem identification to evaluate the documented effectiveness of modern pedagogical interventions like Task-Based Language Teaching (TBLT) and simulator-based training within Indonesian MET institutions, thereby bridging the gap between identifying the problem and providing evidence-based, actionable solutions.

2. METHOD

This study employs a qualitative literature review methodology. The research synthesizes and analyzes findings from a comprehensive body of scholarly work, including peer-reviewed journal articles, conference proceedings, and official documents from the International Maritime Organization (IMO). The scope of the review was limited to publications from 2019 to the present

to ensure the currency and relevance of the findings. The search strategy focused on identifying research conducted within the specific context of Indonesian Maritime Education and Training (MET) institutions, including prominent academies such as Politeknik Ilmu Pelayaran (PIP) Semarang, Universitas Maritim AMNI Semarang, and Politeknik Bumi Akpelni.

Data was gathered using targeted keyword searches in academic databases, including "Maritime English Indonesia," "Indonesian cadets," "linguistic interference Bahasa Indonesia," "pedagogical challenges Maritime English," "task-based language teaching maritime," and "maritime simulators Indonesia." The collected literature was systematically analyzed to identify recurring themes, key findings, and documented outcomes related to the challenges in ME acquisition and the effectiveness of various pedagogical interventions. This synthesis approach allows for the construction of a holistic, evidence-based framework that explains the complex nature of the issue and points toward effective solutions.

3. RESULTS AND DISCUSSION

The literature review reveals a complex interplay of factors that hinder Indonesian cadets' mastery of Maritime English. These can be categorized into foundational challenges faced by the cadets themselves, systemic issues within the educational ecosystem, and the documented results of interventions designed to address these problems.

A Taxonomy of Challenges Confronting Indonesian Cadets

The difficulties experienced by Indonesian cadets stem from a combination of linguistic weaknesses, the influence of their native language, and significant psychological barriers.

Foundational Linguistic Deficiencies

Before engaging with specialized ME, many cadets are hindered by gaps in their General English (GE) proficiency. A frequently cited challenge is a limited vocabulary, which inhibits their ability to form basic sentences and comprehend technical materials (Dirgayasa, 2022; Barus & Simanjuntak, 2023; Sukomardojo & Ratnaningsih, 2020). This is coupled with significant difficulties in pronunciation, a problem exacerbated by the low correspondence between spelling and sound in English compared to the phonetic nature of Bahasa Indonesia (Haryani et al., 2021; Syarif, 2019). This leads to hesitation and a lack of confidence when speaking (Barus & Simanjuntak, 2023).

The Pervasive Influence of First Language (L1) Interference

These foundational weaknesses are amplified by negative transfer from Bahasa Indonesia. Phonological interference is pronounced, as cadets substitute English sounds absent in their L1 (e.g., /v/, /θ/, /ð/) with the closest Indonesian equivalent (e.g., /f/, /t/, /d/) and struggle to distinguish between key vowel sounds like /ɪ/ and /iː/ (e.g., ship vs. sheep) (Haryani et al., 2021; Alrajafi, 2021; Syarif, 2019). Grammatical interference is also common, with frequent errors in areas that do not exist in Bahasa Indonesia, such as verb tenses, subject-verb agreement, and the use of articles ('a', 'an', 'the') (Haryani et al., 2021; Cahyani et al., 2021; Al Haqeeqah, 2021). Lexical-semantic interference manifests as literal, word-for-word translations that result in unnatural or incorrect English phrasing (Jannatussholihah & Triyono, 2019; Syarif, 2019). In a maritime context, these "errors" are not merely academic; they represent potential safety-critical failures in communication.

Psychological and Affective Barriers

Linguistic struggles are inextricably linked to the learner's psychological state. Studies of Indonesian cadets identify high levels of communication apprehension, including nervousness and anxiety rooted in a profound fear of making mistakes (Barus & Simanjuntak, 2023; Dewi et al., 2021). This fear is often reinforced by peer ridicule, creating a high-anxiety environment where cadets choose silence over participation (Barus & Simanjuntak, 2023). This cycle erodes self-confidence and undermines motivation, as cadets become disengaged from classroom activities they find too difficult or boring, despite understanding the career importance of ME (Barus & Simanjuntak, 2023; Fatimah, 2024).

The Intercultural Communication Dimension

These challenges are magnified in the multicultural environment of an international vessel. The language barrier is often the most significant obstacle to effective communication and socialization for Indonesian seafarers, leading to social isolation and mental health challenges (Riyanto et al., 2023; Jensen & Oldenburg, 2020).

The Pedagogical Ecosystem: Maritime English Education in Indonesia

The challenges faced by cadets are sustained by systemic shortcomings within the ME pedagogical ecosystem in Indonesia.

Curriculum-Reality Chasm

A significant disconnect exists between industry needs and academic curricula. Needs analyses conducted at Indonesian maritime academies consistently show a demand for practical, communicative skills focused on job-related tasks like using the SMCP, handling distress communications, and understanding VTS procedures (Sari & Sari, 2020; Fatimah, 2020). However, evaluations of existing coursebooks and materials reveal an over-reliance on grammar-oriented textbooks that lack authentic dialogues, are not learner-centered, and fail to reflect the multicultural reality of seafaring (Haryani et al., 2021; Rahmiani et al., 2024; Suherdi et al., 2022; Coslovich, 2021).

Instructional Challenges

ME instructors face their own constraints. A critical problem is that cadets often enter ME courses with low General English proficiency, forcing instructors to teach basic English rather than the specialized content intended (Fatimah, 2024; Fatimah, 2020). Furthermore, there is often a competency gap among lecturers, who may be either English specialists with little maritime knowledge or maritime experts with no formal training in language pedagogy (Dirgayasa, 2022; Jones, 2021). The shift to online learning has introduced further challenges, including low student participation, reduced motivation, and significant technical barriers like poor internet connectivity (Fatimah, 2024; Nugroho et al., 2021).

Evidence-Based Pedagogical Interventions and Their Outcomes

Despite these challenges, research within Indonesian MET institutions points toward effective solutions that shift away from traditional methods.

Task-Based Language Teaching (TBLT)

TBLT, an approach where learning is centered around completing authentic, real-world tasks, has shown significant success. A case study at the Semarang Merchant Marine Polytechnic (SMMP) found that a TBLT curriculum led to a 16% improvement in cadets' overall English communication skills, with "very good" scores in grammar and fluency (Yulistio, 2025). TBLT is effective because it focuses on using language for a meaningful purpose, which reduces the anxiety associated with making errors and increases confidence and motivation (Rohani, 2013; Yulistio, 2025). By using tasks that mirror professional duties (e.g., creating a voyage plan, role-playing an

emergency drill), TBLT directly bridges the curriculum-reality chasm (Jones, 2021; Yulistio, 2025).

Simulation and Technology

High-fidelity simulators provide an authentic, immersive environment for practicing ME in high-stakes contexts. A study at the Merchant Marine Polytechnic in Makassar demonstrated that a learning model built around a bridge simulator was a valid and effective method for moving beyond ineffective, teacher-centered instruction (Katuuk, 2025; Dirgayasa, 2022). Simulators allow for the integration of language practice with technical skill development, ensuring that ME is learned as a vital component of professional competence (Dirgayasa, 2022). Beyond full-mission simulators, e-learning platforms and digital tools offer flexible and interactive ways to enhance instruction, provide individualized feedback on pronunciation, and prepare cadets for computer-based industry tests like the Marlins Test (Rahmiani et al., 2024; Jones, 2021; Barus & Simanjuntak, 2023).

4. CONCLUSION

The analysis presented in this paper demonstrates that the challenges confronting Indonesian maritime cadets in mastering Maritime English are not isolated issues but components of a complex, interconnected system. The proficiency gap is the cumulative result of foundational linguistic deficits, predictable L1 interference, a debilitating psychological cycle of low confidence and high anxiety, and systemic shortcomings within the pedagogical ecosystem. The core of the problem is a "vicious cycle" where poor skills lead to errors, which fuels fear and avoidance of practice, thus perpetuating the lack of skills. This is compounded by a systemic "curriculum-reality chasm," where instruction fails to align with the practical, communicative competencies demanded by the global maritime industry. Addressing this requires a coordinated, multi-pronged approach.

Recommendations
1. For Maritime Education and Training (MET) Institutions:
    a. Prioritize Curriculum Reform
       Conduct regular needs analyses involving all stakeholders to ensure curricula are communicative, task-based, and explicitly integrate the IMO SMCP (Sari & Sari, 2020; de Castro, 2021).
    b. Invest in Authentic Materials

Move beyond single, grammar-focused textbooks by developing or procuring a rich variety of authentic, task-based learning materials (Fatimah, 2020; Jones, 2021).

c. Commit to Technology-Enhanced Learning

Make strategic investments in high-fidelity simulators and integrate their use into ME courses. Support robust e-learning infrastructure to offer flexible and individualized practice (Katuuk, 2025; Sirbu & Alibec, 2023; Jones, 2021).

2. For ME Instructors and Lecturers:

a. Adopt Student-Centered Pedagogies

Transition from traditional methods to student-centered approaches like TBLT and simulation-based training (Yulistio, 2025; Praheto et al., 2020).

b. Address Affective Barriers

Create a psychologically safe learning environment where errors are treated as learning opportunities. Use collaborative tasks to reduce individual pressure and build confidence (Rohani, 2013).

c. Mitigate L1 Interference Explicitly

Use contrastive analysis and targeted drills to address predictable phonological and grammatical errors stemming from Bahasa Indonesia (Barus & Simanjuntak, 2023; Syarif, 2019).

3. For National Policymakers and Maritime Authorities:

a. Establish Modernized National ME Standards

Enforce a national ME curriculum standard that is rigorously aligned with STCW and IMO requirements and prioritizes communicative competence (Dirgayasa, 2022; Sari & Sari, 2020).

b. Mandate Continuous Professional Development

Fund and facilitate professional development for ME lecturers focused on modern ESP pedagogy, TBLT, and the use of simulators (Jones, 2021; Dirgayasa, 2022).

c. Foster a National Research Culture

Encourage and support further research into ME teaching and learning within the Indonesian context to drive continuous, evidence-based improvement.

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