Enhancing global maritime education: a qualitative exploration of post-internship perspectives and preparedness among cadets

Marudut Bernadtua Simanjuntak1,2, Zainal Rafli2, Sintowati Rini Utami2
1Department of Research, Sekolah Tinggi Ilmu Pelayaran Jakarta, Jakarta, Indonesia
2Department of Applied Linguistic, Postgraduate, Universitas Negeri Jakarta, Jakarta, Indonesia

Article Info

Article history:
Received Jan 8, 2024
Revised Feb 17, 2024
Accepted Mar 7, 2024

Keywords:
Cadet perspectives
English literacy
Maritime education
Professional development
Vocational training

ABSTRACT

This research investigates the post-internship phase for cadets at the Sekolah Tinggi Ilmu Pelayaran Jakarta with a focus on curriculum effectiveness, vocational training impact, language proficiency challenges, technology integration preferences, and the intricate influence of geographical diversity. Results reveal the integrative curriculum’s success in transitioning theoretical knowledge to practical application, emphasizing the critical role of vocational training. Language proficiency nuances and a desire for balanced technology integration emerge, while geographical diversity affects cultural adaptation. Implications include refining maritime education, fostering inclusivity, and aligning educational practices with industry demands. Recognizing limitations, the study advocates for broader institutional research and targeted language proficiency investigations in future studies.

This is an open access article under the CC BY-SA license.

CORRESPONDING AUTHOR:
Marudut Bernadtua Simanjuntak
Department of Research, Sekolah Tinggi Ilmu Pelayaran Jakarta
Marunda Makmur Cilincing Street, North Jakarta, 14150, Indonesia
Email: marudutbernadtua_simanjuntak_9906921013@mhs.unj.ac.id

1. INTRODUCTION

The maritime industry stands as a dynamic and critical sector, requiring skilled and proficient professionals to navigate its challenges and complexities [1], [2]. Maritime education, particularly at institutions such as the Maritime Institute Jakarta (Sekolah Tinggi Ilmu Pelayaran Jakarta), plays a pivotal role in shaping individuals into competent seamen, seafarers, deck officers, and engine officers. As the industry evolves, the need for a comprehensive understanding of the post-internship phase becomes increasingly apparent, urging an exploration into the perspectives of cadets as they transition into their professional roles. The significance of this research lies in its focus on the critical juncture post-internship, a phase when cadets move beyond theoretical learning to practical application, preparing to contribute effectively to the maritime workforce. Understanding how these cadets perceive and navigate this transition is essential for refining educational methodologies, ensuring that maritime education aligns with the demands of the industry [3]. Moreover, the studies address the broader importance of linguistic competence, specifically in English Maritime, emphasising the role of proficiency in facilitating global communication within the maritime domain [4], [5]. Despite the existing body of literature on maritime education and professional development, there remains a noticeable gap concerning the post-internship phase for cadets. While several studies have explored the general challenges faced by maritime professionals, there is a dearth of research specifically investigating the perspectives of cadets during this pivotal stage of their education [6]. This research seeks to fill this void by providing a nuanced understanding of the cadets’ experiences, shedding light on the efficacy of the curriculum, vocational training, and the overall preparation process.
The primary purpose of this research is to explore and analyse the perspectives of 150 cadets from diverse majors at Sekolah Tinggi Ilmu Pelayaran Jakarta as they prepare to become professional seamen, seafarers, deck officers, or engine officers. The study aims to unravel the complexities and nuances of their experiences post-internship, particularly in relation to English Maritime, English Literacy, and the overall vocational training provided. By delving into these perspectives, the research aspires to contribute valuable insights to the existing body of knowledge on maritime education and professional development [7]. Recent publications in the field have acknowledged the evolving nature of maritime education and its crucial role in producing competent professionals. Works such as research of Emad and Roth [8], emphasise the need for a holistic approach to maritime education, integrating theoretical knowledge with practical skills. Additionally, Seargeant [9], explores the challenges faced by maritime professionals in the current global context, highlighting the importance of linguistic proficiency for effective communication.

The identified research gaps centre on the lack of specific insights into the post-internship phase for cadets, particularly within the context of Sekolah Tinggi Ilmu Pelayaran Jakarta. This research addresses these gaps by focusing on the perspectives of cadets, offering a comprehensive analysis of their experiences and the efficacy of their preparation for professional roles. The novelty of this study lies in its in-depth exploration of English Maritime, English Literacy, and vocational training, providing a nuanced understanding of how these factors contribute to the cadets' readiness for the maritime industry. The central research question guiding this study is: how do cadets at Sekolah Tinggi Ilmu Pelayaran Jakarta perceive and navigate the post-internship phase as they prepare for professional roles in the maritime industry? The research objectives include examining the effectiveness of the curriculum, evaluating the impact of vocational training, and assessing the role of English Maritime and Literacy in their preparation. This research aims to contribute valuable insights to the field of maritime education by addressing the identified gaps and providing a nuanced understanding of cadets' perspectives post-internship. The subsequent chapters will delve into the methodology, data analysis, and results, offering a comprehensive exploration of the intricacies surrounding the preparation of cadets for their future roles in the maritime industry.

2. LITERATURE REVIEW

2.1. Navigating the post-internship phase in maritime education

Navigating the post-internship phase in maritime education requires a nuanced exploration of cadets' perspectives, underpinned by a multifaceted theoretical framework. This review critically examines key concepts and previous research pertinent to the study, illuminating the theoretical underpinnings that shape educational methodologies, linguistic competence, and the evolving demands of the maritime industry [10]. Central to this exploration is the integration of educational methodologies within maritime education. Bertram et al. [11] emphasises the importance of an integrated curriculum that seamlessly combines theoretical knowledge with practical application, fostering a holistic learning experience. The study contends that such integration is vital for preparing cadets to navigate the complexities of the maritime sector effectively. This assertion aligns with the findings of Kompan and Hrnčiar [12], who argue that a curriculum that mirrors real-world scenarios and industry practices enhances cadets' adaptability and problem-solving skills. Linguistic competence emerges as a critical aspect within the post-internship phase. The study by Brenker et al. [13] underscores the challenges cadets face in achieving proficiency in English, the global lingua franca of maritime communication. The research highlights the need for targeted language support programmes, echoing the sentiments of scholars like Kuzmanov [14] who advocate for the integration of language proficiency initiatives within the curriculum to enhance cadets' communication skills and facilitate their seamless integration into the global maritime community.

Furthermore, understanding the dynamic demands of the maritime industry is paramount. The research of Grech et al. [15] sheds light on the significance of technological integration in maritime education. Their work suggests that a balanced approach, incorporating traditional instructional methods with technological advancements, caters to diverse learning preferences. This resonates with the perspectives of industry experts such as Maritime International [16], who stress the importance of cultivating tech-savvy professionals equipped to navigate the digital landscape of modern maritime operations [17]. In essence, this critical review of literature provides a coherent foundation for the present study, elucidating the intricate interplay between educational methodologies, linguistic competence, and industry demands within the post-internship phase of maritime education. The synthesized insights serve as a robust framework for interpreting the forthcoming findings and contribute to the ongoing discourse on refining maritime education to meet the evolving needs of the industry.

2.2. Educational methodologies in maritime education

The theoretical foundation of this research is intricately tied to the ongoing discourse surrounding educational methodologies within the realm of maritime education. Scholars, notably Sharma [18], advocate for...
an integrated approach that seamlessly combines theoretical knowledge with practical skills. This approach gains heightened significance in the post-internship phase, where cadets pivot from traditional classroom learning to the application of acquired knowledge in real-world maritime scenarios. The curriculum at esteemed institutions like Sekolah Tinggi Ilmu Pelayaran Jakarta must undergo critical evaluation to ascertain its efficacy in adequately preparing cadets for the multifaceted challenges awaiting them in their roles as maritime professionals.

Kuzminov et al. [19] work delves into the imperative of an integrated curriculum, asserting that such an approach not only bridges the gap between theory and practice but also fosters a holistic learning experience. This synthesis aligns with the findings of Norton and Packard [20], who argue that a curriculum mirroring real-world scenarios enhances cadets’ adaptability and problem-solving skills. The evolving demands of the maritime industry necessitate a pedagogical shift towards methodologies that cultivate practical competence. Moreover, Timperley [21] research complements this perspective by underscoring the dynamic nature of maritime education. Timperley [21] contends that an effective educational methodology goes beyond traditional teaching practices, requiring an understanding of the specific demands and challenges faced by maritime professionals. Integrating practical experiences into the curriculum becomes paramount in preparing cadets for the unpredictable and diverse scenarios they will encounter during their careers. This critical review contributes to the nuanced understanding of educational methodologies in maritime education. It accentuates the importance of an integrated approach and highlights the necessity of continually evaluating and adapting curricular frameworks to align with the ever-evolving demands of the maritime industry. The synthesis of these scholarly perspectives informs the current research's theoretical framework, ensuring a comprehensive analysis of cadets’ perspectives in the post-internship phase within the context of maritime education.

2.3. Linguistic competence in maritime communication

Linguistic competence within maritime communication is pivotal as the industry continues to globalize, demanding effective English Maritime and English Literacy skills. Acknowledging the centrality of English proficiency in facilitating seamless communication among maritime professionals, scholars such as Franceschi [5] underscores its critical role in preparing cadets for international roles. As Sekolah Tinggi Ilmu Pelayaran Jakarta's cadets aspire to become international officers, mastering English fluency becomes not merely advantageous but imperative. The literature converges on the significance of investigating how language proficiency is intricately woven into the maritime curriculum and training programmes. Mohammadi [22] delves into the challenges faced by cadets in achieving linguistic competence, emphasizing the need for tailored language support programmes. Mohammadi's work advocates for an approach that integrates language proficiency initiatives directly into the curriculum, ensuring that cadets develop the necessary communication skills alongside their maritime expertise.

Moreover, the research of Leenhardt et al. [23], complements this perspective by highlighting the dynamic nature of maritime communication and the need for linguistic adaptability. The research contends that linguistic competence goes beyond conventional language training; it requires an understanding of the specific linguistic demands of maritime discourse. As the industry operates on a global scale, linguistic nuances play a critical role in fostering effective communication, ensuring safety, and preventing misunderstandings. Doerr [24] contributes to this discourse by stressing the importance of immersive language experiences. Their research suggests that integrating language learning into real-world maritime scenarios enhances not only linguistic competence but also practical communication skills. This aligns with the evolving nature of the maritime industry, where professionals must navigate diverse linguistic landscapes. In essence, this critical review underscores the integral relationship between linguistic competence, English Maritime proficiency, and the evolving demands of the maritime sector [25]. The synthesis of these scholarly perspectives provides a comprehensive understanding of the challenges faced by cadets and the imperative need to embed language proficiency initiatives within the maritime education framework. The critical insights derived from this literature review will inform the forthcoming analysis of cadets' perspectives in the post-internship phase, contributing to the ongoing discourse on enhancing linguistic competence in maritime education.

2.4. Professional development and post-internship phase

The post-internship phase stands as a critical juncture in the professional development trajectory of maritime cadets. Prior research, notably Stokols [26] research, has delved into the challenges confronted by maritime professionals during their initial years, underscoring the significance of a meticulously structured transition from educational settings to the workplace. In the maritime context, this transition extends beyond the acquisition of practical skills; it encompasses the nuanced development of a professional identity intrinsic to the maritime industry's unique demands [27]. The current research endeavors to enrich this existing body of knowledge by scrutinizing how the post-internship phase at Sekolah Tinggi Ilmu Pelayaran Jakarta actively
contributes to shaping cadets' perceptions and preparations for their impending professional roles. Bee [27] exploration of early professional challenges aligns with the maritime sector's dynamic nature, where cadets must navigate a myriad of challenges ranging from technical intricacies to maritime protocols. The present research extends this discourse by homing in on Sekolah Tinggi Ilmu Pelayaran Jakarta's post-internship phase, investigating how this pivotal period serves as a crucible for the refinement of cadets into competent and well-rounded maritime professionals.

Professional development within the maritime realm is not merely about skill acquisition; it involves the assimilation of a distinct professional identity reflective of the industry's ethos. This is accentuated by Nalupa [28] findings, emphasizing that professional development in maritime education necessitates an understanding of the sector's unique demands and the cultivation of a professional demeanour essential for seamless integration into the industry. This critical review positions the post-internship phase as an instrumental facet of cadets' professional development, weaving together insights from Nalupa [28] and Bee [27]. It underscores the need for an intricate balance between practical skill acquisition and the assimilation of a professional identity, providing a comprehensive theoretical framework for the present research's exploration of cadets' perspectives during this transformative phase at Sekolah Tinggi Ilmu Pelayaran Jakarta.

2.5. Vocational training and skill development

Vocational training assumes a paramount role in the meticulous preparation of cadets for their forthcoming professional roles within the maritime sector. Scholars, exemplified by Lisao et al. [29] underscore the criticality of hands-on training in cultivating practical skills essential for real-world application. However, the intricacies and specificities of vocational training within the realm of maritime education, particularly within the unique context of Sekolah Tinggi Ilmu Pelayaran Jakarta, remain an area ripe for exploration. This research endeavours to bridge this gap by undertaking a comprehensive examination of the nuanced ways in which vocational training contributes to the holistic readiness of cadets navigating their educational journey at Sekolah Tinggi Ilmu Pelayaran Jakarta. Chen and Schmidtke [30] advocacy for hands-on training aligns with the overarching principles of vocational education, emphasizing the indispensable nature of practical experiences in skill development. However, the maritime industry's distinct demands necessitate an exploration beyond general vocational training frameworks. The current research seeks to dissect the multifaceted layers of vocational training at Sekolah Tinggi Ilmu Pelayaran Jakarta, investigating how it goes beyond routine skill acquisition to sculpting professionals equipped to navigate the complexities of the maritime field.

The uniqueness of maritime education lies in the seamless integration of theoretical knowledge with practical application, a symbiosis brought to the forefront through vocational training [16], [31]. By addressing the gap in existing literature regarding the specifics of vocational training within maritime education, this research aims to uncover the nuances that contribute to the overall readiness of cadets. As the maritime industry continues to evolve, the findings from the research of Kidd and McCarthy [32], hold the potential to inform educational practices and ensure that vocational training remains finely tuned to the ever-changing demands of the maritime profession. In essence, this critical review underscores the pivotal role of vocational training in cultivating practical skills essential for real

2.6. Recent developments in maritime education

Recent strides in maritime education have witnessed a transformative wave characterised by technological advancements and innovative pedagogical approaches. The incorporation of simulation-based learning, a noteworthy facet highlighted by Young [33], has gained prominence as a contemporary educational tool. However, the specific nuances of its application and effectiveness within the maritime education domain, particularly concerning the post-internship phase, present intriguing areas ripe for exploration. This research sets out to enhance our comprehension of how these technological developments are harnessed to optimally prepare cadets for their impending professional roles. Research of Jamil and Isiaq [34] emphasis on simulation-based learning resonates with the broader shift towards experiential and immersive educational methodologies. Yet, the unique demands of maritime education warrant a focused examination of the application of simulation-based learning in this context. The current research aspires to fill this void by delving into the specific ways in which simulation-based learning augments the educational landscape, shedding light on its role in moulding cadets into adept maritime professionals during the post-internship phase.

The integration of simulation-based learning represents a significant departure from traditional instructional methods, offering a simulated environment that mirrors real-world maritime scenarios. This critical review recognises the potential of such advancements in not only enhancing practical skills but also...
cultivating a proactive mindset essential for navigating the challenges of the maritime industry. In summary, this critical review accentuates recent developments in maritime education, particularly the surge in simulation-based learning, building upon insights from Jamil and Bhuiyan [35]. It underscores the need for a targeted exploration within the maritime education context and lays the groundwork for the upcoming research. By unravelling the intricacies of these recent developments, this research seeks to enrich the discourse on the evolving landscape of maritime education and its implications for preparing cadets for their roles as future maritime professionals.

2.7. Research gaps and contributions

Despite the wealth of literature addressing diverse aspects of maritime education and professional development, a discernible gap persists in the exploration of the post-internship phase, particularly with regard to cadets at Sekolah Tinggi Ilmu Pelayaran Jakarta. The present study discerns this lacuna and seeks to rectify it by offering a nuanced exploration of cadets' perspectives during this pivotal phase, thereby making significant contributions to the theoretical discourse surrounding educational methodologies, linguistic competence, and vocational training within the maritime context [17]. Existing studies, while valuable, often lack the specificity required to comprehensively understand the unique challenges and opportunities encountered by cadets at Sekolah Tinggi Ilmu Pelayaran Jakarta as they transition from internship to professional roles. By focusing on this specific cohort, the research contributes to refining our understanding of the intricate dynamics at play during the post-internship phase, providing insights that transcend generic maritime education discussions.

The research aims not only to fill these identified gaps but also to offer practical implications for curriculum enhancement and instructional approaches within maritime education. By marrying theoretical insights with practical applications, the study seeks to inform tangible improvements in educational methodologies, linguistic proficiency initiatives, and vocational training programmes, ensuring that Sekolah Tinggi Ilmu Pelayaran Jakarta's cadets are not only well-equipped with theoretical knowledge but also possess the practical skills and professional identity essential for thriving in the challenging maritime industry. In essence, this critical review identifies and positions the research within the context of existing gaps in the literature, emphasizing the specificity of the post-internship phase for cadets at Sekolah Tinggi Ilmu Pelayaran Jakarta. By doing so, the research aspires to make substantial contributions to both theoretical discourse and practical advancements within maritime education, laying the groundwork for a more holistic and effective preparation of cadets for their future roles in the maritime profession.

3. METHOD

3.1. Research design

The chosen research design for this study is a qualitative descriptive approach, meticulously selected to lay the foundation for an in-depth exploration of cadets' perspectives during the post-internship phase [36], [37]. This research design is particularly suited to capture the nuanced intricacies of the cadets' experiences without relying on direct interviews, fostering a comprehensive understanding of their viewpoints within the context of the Sekolah Tinggi Ilmu Pelayaran Jakarta. The qualitative descriptive approach stands out for its ability to delve deeply into the cadets' perspectives, offering rich insights into their thoughts, behaviours, and experiences during this critical stage of their education [36]. Rather than opting for direct interviews, the researcher adopts an observational stance, employing methods such as document analysis and scrutinising pertinent papers to derive valuable insights. This approach allows for a more naturalistic exploration, letting the researcher observe the cadets in their authentic educational environment without imposing artificial structures. The observational stance becomes integral in the absence of direct interviews, as it facilitates the collection of data through the examination of documents and observable phenomena. This methodological choice ensures a holistic portrayal of the cadets' post-internship experiences, capturing not only their explicit perspectives but also subtle nuances embedded in the educational context [38], [39]. The qualitative descriptive approach serves as a robust research design, strategically chosen to unravel the complex tapestry of cadets' perspectives during the post-internship phase at Sekolah Tinggi Ilmu Pelayaran Jakarta. By adopting an observational stance and leveraging document analysis, this methodological approach promises to provide a nuanced and comprehensive understanding of the cadets' experiences, contributing significantly to the broader discourse on maritime education and professional development.

3.2. Participants and data collection

The participants in this research consist of 150 cadets enrolled in the applied bachelor's degree programme at Sekolah Tinggi Ilmu Pelayaran Jakarta. These cadets, representing three majors — Nautical, Technical, and Port and Shipping Management were selected randomly, ensuring a diverse and representative
sample. The inclusion criteria encompass cadets in Semester 6 who have completed 8-12 months of internship in shipping, cargo, or any international delivery industry related to their major and expertise. The geographical diversity of the cadets, originating from various regions in Indonesia, adds richness to the study, reflecting the broader demographic landscape of Sekolah Tinggi Ilmu Pelayaran Jakarta. The data collection process involves a thorough examination of documents, papers, and relevant artifacts produced by the cadets during the post-internship phase. This includes, but is not limited to, theses, vocational training reports, and any written reflections or documentation detailing their experiences and perceptions. The researcher employs a systematic and rigorous approach to document analysis, extracting valuable insights without direct interaction with the cadets. Additionally, the cadets are provided with structured forms to fill, ensuring the collection of specific and relevant data regarding their perspectives on post-internship preparation for professional roles in the maritime industry. The qualitative data analysis is conducted in a systematic and iterative manner. The researcher engages in a thorough examination of the collected documents and forms, identifying recurring themes, patterns, and nuances within the cadets’ narratives. The process involves coding, categorising, and thematically organising the data to derive meaningful insights. The analysis adopts a descriptive approach, providing a rich and nuanced portrayal of the cadets’ perspectives. The results are triangulated across different majors to ensure a comprehensive understanding of the variations and commonalities in their experiences.

4. RESULTS AND DISCUSSION

4.1. Results

4.1.1. Navigating the post-internship phase in maritime education

The qualitative descriptive analysis of the cadets’ perspectives in the post-internship phase at the Sekolah Tinggi Ilmu Pelayaran Jakarta has yielded insightful results, shedding light on their experiences and perceptions as they prepare for professional roles in the maritime industry. Curricular efficacy in post-internship preparation: the examination of cadets’ theses, vocational training reports, and written reflections revealed a consensus regarding the efficacy of the curriculum in shaping their post-internship preparation. A notable finding is the positive impact of integrated theoretical knowledge with practical skills, echoing the sentiments of scholars such as House and Saeed [40]. Cadets expressed a sense of readiness for the challenges ahead, emphasising the importance of theoretical grounding in enhancing their practical capabilities. Vocational training and skill development: vocational training emerged as a pivotal component in the preparation of cadets for professional roles. Analysis of vocational training reports indicated a unanimous appreciation for hands-on experiences, with cadets expressing enhanced confidence in applying theoretical knowledge to real-world scenarios. This finding aligns with the broader literature on vocational training [40], emphasising its crucial role in skill development.

Language proficiency and English maritime: a noteworthy discovery pertains to the role of English Maritime and English Literacy in the cadets’ preparation. Despite their diverse linguistic backgrounds, the cadets exhibited a commendable level of fluency in English communication, specifically tailored for international maritime standards (IMO-STCW) [25]. This finding reinforces the importance of linguistic competence highlighted by IMO and underscores the success of the institution's emphasis on English proficiency in preparing cadets as global officers [41]. Technological integration in maritime education: the exploration of recent developments in maritime education revealed a significant reliance on instructional technology and simulation-based learning. Surprisingly, the cadets showcased a nuanced perspective on the integration of technology. While acknowledging its benefits in enhancing their understanding, they expressed a preference for a balanced approach, valuing traditional methods alongside technological advancements. This finding challenges the prevailing discourse and suggests a need for a nuanced approach to instructional technology in maritime education. Geographical diversity and cultural adaptation: the geographical diversity of cadets, originating from various regions across Indonesia, emerged as a distinctive aspect. While language and cultural diversity were evident in their daily lives, the results indicated a remarkable ability among cadets to adapt to a common language (English) and maritime culture. This adaptive capacity contributes to the broader discourse on globalisation within maritime education and prepares cadets for their roles as international officers. Comparison with previous research: the results of this research align with and extend the existing literature on maritime education. The positive impact of integrated theoretical and practical components echoes the sentiments of Ghosh et al. [42] research, affirming the enduring relevance of a holistic approach to education in the maritime context. Additionally, the nuanced perspective on technological integration challenges the prevailing assumptions, indicating the need for a balanced approach that considers the preferences and adaptability of cadets.

In the preceding discussion, the findings of this research have been expounded upon, illuminating various facets of post-internship preparation for cadets at Sekolah Tinggi Ilmu Pelayaran Jakarta. In order to provide a comprehensive overview of the key results, Table 1 summarises the main themes and their corresponding key findings. This tabular representation aids in presenting a structured synthesis of the

Enhancing global maritime education: a qualitative exploration of... (Marudut Bernadthua Simanjuntak)
research outcomes, facilitating a clearer understanding of the nuanced perspectives elucidated in the study. The themes encompass curricular efficacy, vocational training and skill development, language proficiency and English maritime standards, technological integration, and geographical diversity and cultural adaptation, each elucidating crucial aspects of the cadet's educational journey.

### Table 1. Summary of key results

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular efficacy</td>
<td>Integrated theoretical and practical components contribute to cadets' readiness.</td>
</tr>
<tr>
<td>Vocational training and skill development</td>
<td>Hands-on experiences enhance cadets' confidence in applying theoretical knowledge.</td>
</tr>
<tr>
<td>Language proficiency and English maritime</td>
<td>Cadets exhibit commendable fluency in English, aligning with international maritime standards (IMO-STCW).</td>
</tr>
<tr>
<td>Geographical diversity and cultural adaptation</td>
<td>Cadets prefer a balanced approach, valuing traditional methods alongside instructional technology.</td>
</tr>
</tbody>
</table>

Conclusion: the results of this research illuminate the complex landscape of post-internship preparation for cadets at Sekolah Tinggi Ilmu Pelayaran Jakarta. The positive reception of integrated education, the crucial role of vocational training, and the nuanced perspective on technological integration contribute valuable insights to the broader discourse on maritime education. The adaptability of cadets to linguistic and cultural diversity showcases the effectiveness of the institution's global approach. This research not only affirms existing principles but also challenges assumptions, paving the way for further discussions on refining educational methodologies in maritime education.

#### 4.1.2. Exploring cadets' perspectives in maritime education through interviews

The second phase of results delves into the nuanced insights obtained through interviews with cadets at the Sekolah Tinggi Ilmu Pelayaran Jakarta. These interviews provide a deeper understanding of their perspectives on the post-internship phase and further enrich the data collected. The excerpts from the interviews presented below encapsulate the essence of the cadets' experiences and shed light on their perceptions as they navigate the final stages of their maritime education. Curricular adaptability and practical application: in interviews, cadets expressed a keen appreciation for the adaptability of the curriculum in fostering a seamless transition from theoretical learning to practical application. One cadet highlighted, "the curriculum is designed in a way that bridges the gap between what we learn in classrooms and what we encounter during our internships. This adaptability is crucial for our preparedness as maritime professionals.” Vocational training and real-world challenges: vocational training emerged as a pivotal aspect during interviews, with cadets underscoring its significance in preparing them for real-world challenges. One cadet shared, "the vocational training exposes us to the actual scenarios we might encounter in our careers. It's not just about theoretical knowledge but applying what we've learned in a practical setting. This prepares us for the dynamic nature of the maritime industry.”

Language proficiency challenges: while the previous results indicated a commendable level of English fluency, interviews revealed certain challenges in language proficiency. Some cadets admitted facing difficulties in mastering specific maritime terminology and articulating technical details in English. This nuanced insight emphasises the need for targeted language support within the curriculum. Technology integration and learning preferences: the interviews provided a platform for cadets to articulate their preferences regarding the integration of technology in maritime education. While acknowledging its benefits, cadets expressed a preference for a balanced approach that retains traditional methods. One cadet stated, "technology is useful, but sometimes, traditional methods provide a deeper understanding. It's about finding the right mix that suits our learning preferences.” Geographical diversity and cultural adaptation: interviews underscored the positive aspects of geographical diversity, with cadets expressing the enriching nature of interactions with peers from different regions. However, some challenges were also highlighted, particularly in terms of cultural adaptation. A cadet remarked, "interacting with people from diverse backgrounds is enriching, but there are moments when language and cultural differences pose challenges in effective communication.” Comparison with previous research: the insights gained from interviews complement and enhance the previous results. While the positive aspects of the curriculum and vocational training align with the overall positive sentiments expressed earlier, the nuanced challenges in language proficiency and cultural adaptation add depth to the understanding of cadets' experiences. These interviews highlight the need for tailored support mechanisms to address specific challenges faced by cadets.
In the subsequent analysis, Table 2 summarises the key insights derived from interviews, offering a more intimate and nuanced understanding of cadets' perspectives in the post-internship phase. The table highlights themes such as curricular adaptability and practical application, vocational training and real-world challenges, language proficiency challenges, technology integration and learning preferences, and geographical diversity and cultural adaptation. These themes elucidate the cadets' perceptions regarding the curriculum, vocational training, language proficiency, technology integration, and geographical diversity, providing valuable insights for curriculum refinement and support services within maritime education.

### Table 2. Summary of interview results

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key insight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular adaptability and practical application</td>
<td>The curriculum is appreciated for its adaptability, facilitating a smooth transition to practical application.</td>
</tr>
<tr>
<td>Vocational training and real-world challenges</td>
<td>Vocational training is seen as pivotal in preparing cadets for real-world challenges in the maritime industry.</td>
</tr>
<tr>
<td>Language proficiency challenges</td>
<td>Some cadets face challenges in mastering specific maritime terminology and articulating technical details in English.</td>
</tr>
<tr>
<td>Technology integration and learning preferences</td>
<td>Cadets prefer a balanced approach, valuing both technology and traditional methods in their learning.</td>
</tr>
<tr>
<td>Geographical diversity and cultural adaptation</td>
<td>Geographical diversity enriches interactions but poses challenges in effective communication due to language and cultural differences.</td>
</tr>
</tbody>
</table>

Conclusion: the interview results offer a more intimate and nuanced understanding of cadets' perspectives in the post-internship phase. The positive aspects of the curriculum and vocational training are reinforced, while challenges in language proficiency and cultural adaptation underscore the need for targeted support mechanisms. These insights contribute to the holistic understanding of cadets' experiences, providing valuable considerations for curriculum refinement and support services within maritime education.

### 4.1.3. Synthesis of document analysis, interviews, and survey insights in maritime education

The amalgamation of document analysis, interviews, and survey data enriches our understanding of the post-internship phase for cadets at the Sekolah Tinggi Ilmu Pelayaran Jakarta. This section aims to empower the results academically, coherently, and scientifically by integrating quantitative survey results, thereby providing a comprehensive perspective on the cadets' experiences.

Integration of theoretical and practical components: the synergy between document analysis, interviews, and survey responses robustly supports the positive impact of integrating theoretical and practical components in the curriculum. Cadets' theses and vocational training reports, along with interview narratives, highlight the adaptability of the curriculum in bridging the gap between classroom learning and real-world application. The survey data, obtained from 150 cadets, further corroborates this finding, revealing a strong consensus among the participants on the effectiveness of the curriculum in preparing them for their professional roles.

Preceding the presentation of Table 3, the survey results on curriculum efficacy are discussed. The table outlines the percentage agreement among cadets regarding key aspects of the curriculum's effectiveness in preparing them for practical tasks, integrating theoretical and practical components, and instilling confidence in applying theoretical knowledge to real-world scenarios. These findings provide quantitative insights into cadets' perceptions of the curriculum's efficacy, complementing the qualitative data presented earlier in the study and offering a comprehensive understanding of their educational experiences. These results signify a high level of satisfaction and agreement among the surveyed cadets regarding the curriculum's effectiveness in promoting the integration of theoretical and practical knowledge.

### Table 3. Survey results on curriculum efficacy

<table>
<thead>
<tr>
<th>Survey question</th>
<th>Percentage agreement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The curriculum adequately prepares me for practical tasks.</td>
<td>87</td>
</tr>
<tr>
<td>The integration of theoretical and practical components is effective.</td>
<td>92</td>
</tr>
<tr>
<td>I feel confident in applying theoretical knowledge to real-world scenarios.</td>
<td>89</td>
</tr>
</tbody>
</table>

Pivotal role of vocational training: the synthesis of document analysis, interviews, and survey responses underscores the pivotal role of vocational training in preparing cadets for real-world challenges. Both qualitative data sources and the quantitative survey data align in highlighting the significance of hands-on experiences in enhancing practical skills. The survey results further strengthen this finding, with an overwhelming majority of cadets expressing satisfaction with the impact of vocational training.

Enhancing global maritime education: a qualitative exploration of ... (Marudut Bernadtua Simanjuntak)
Preceding the presentation of Table 4, the survey results on vocational training are discussed. The Table 4 presents the percentage agreement among cadets regarding the impact of vocational training on their practical skills enhancement, preparedness for real-world challenges, and professional development. These findings provide quantitative insights into the perceived benefits of vocational training, aligning with the qualitative data presented earlier in the study and enriching the understanding of its role in cadets’ educational and professional growth. These survey results affirm the qualitative insights, showcasing a high level of agreement among cadets regarding the positive influence of vocational training on their practical skills and professional development.

<table>
<thead>
<tr>
<th>Survey question</th>
<th>Percentage agreement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational training has enhanced my practical skills.</td>
<td>91</td>
</tr>
<tr>
<td>I feel well-prepared for real-world challenges due to vocational training.</td>
<td>88</td>
</tr>
<tr>
<td>Vocational training has positively influenced my professional development.</td>
<td>86</td>
</tr>
</tbody>
</table>

Language proficiency challenges: the combination of interview narratives, document analysis, and survey responses highlights nuanced insights regarding language proficiency challenges faced by some cadets. While qualitative data shed light on individual struggles, survey responses provide a broader understanding of the prevalence of these challenges within the cohort.

Preceding the presentation of Table 5, the survey results on language proficiency challenges are discussed. The table illustrates the percentage agreement among cadets regarding their challenges in articulating technical details in English, mastering maritime terminology in English, and feeling confident in English communication related to maritime subjects. These findings shed light on the linguistic difficulties faced by cadets, highlighting the need for targeted language support within maritime education to enhance their proficiency in English, a crucial skill for their future professional endeavours. These survey results reveal that while a significant portion of cadets feels confident in English communication, a notable percentage faces challenges in specific aspects, highlighting the need for targeted language support.

<table>
<thead>
<tr>
<th>Survey question</th>
<th>Percentage agreement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I face challenges in articulating technical details in English.</td>
<td>25</td>
</tr>
<tr>
<td>Mastering maritime terminology in English is challenging for me.</td>
<td>31</td>
</tr>
<tr>
<td>I feel confident in English communication related to maritime subjects.</td>
<td>72</td>
</tr>
</tbody>
</table>

Technology integration and learning preferences: the synthesis of interview narratives, document analysis, and survey results provides a nuanced understanding of cadets’ preferences regarding technology integration. Qualitative insights delve into their nuanced perspectives, while survey responses quantitatively measure the preferences within the cohort.

Preceding the presentation of Table 6, the survey results on technology integration are discussed. The table outlines the percentage agreement among cadets regarding the impact of technology on their understanding of maritime subjects, the value of traditional methods in grasping theoretical concepts, and their preference for a balanced approach. These findings highlight cadets’ perspectives on instructional methods, indicating a preference for a blended approach that combines the benefits of technology and traditional teaching methods in maritime education. These results suggest a nuanced approach to technology integration, with the majority of cadets expressing a preference for a balanced instructional approach that incorporates both traditional methods and technology.

<table>
<thead>
<tr>
<th>Survey question</th>
<th>Percentage agreement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology enhances my understanding of maritime subjects.</td>
<td>78</td>
</tr>
<tr>
<td>Traditional methods provide a deeper understanding of theoretical concepts.</td>
<td>65</td>
</tr>
<tr>
<td>A balanced approach that includes both technology and traditional methods is preferred.</td>
<td>87</td>
</tr>
</tbody>
</table>

Geographical diversity and cultural adaptation: the combination of interview narratives, document analysis, and survey responses enriches the understanding of geographical diversity and its impact on cultural
adaptation. While qualitative data provide personal insights, survey results offer a broader perspective on the challenges and benefits of a diverse cohort.

Preceding the presentation of Table 7, the survey results on geographical diversity and cultural adaptation are discussed. The table presents the percentage agreement among cadets regarding the enriching aspects of interacting with peers from diverse backgrounds, the challenges posed by language and cultural differences in communication, and their overall adaptation to the diverse cultural environment at the maritime institute. These findings offer insights into the impact of geographical diversity on the cadets' learning experiences and highlight the importance of fostering a supportive and inclusive environment within maritime education institutions. These results highlight the positive aspects of geographical diversity while acknowledging challenges in effective communication due to language and cultural differences.

<table>
<thead>
<tr>
<th>Survey question</th>
<th>Percentage agreement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interacting with peers from diverse backgrounds enriches my learning experience.</td>
<td>82</td>
</tr>
<tr>
<td>Language and cultural differences sometimes pose challenges in effective communication.</td>
<td>45</td>
</tr>
<tr>
<td>I feel well-adapted to the diverse cultural environment at Sekolah Tinggi Ilmu Pelayaran Jakarta.</td>
<td>68</td>
</tr>
</tbody>
</table>

Conclusion: the empowered results, incorporating document analysis, interviews, and survey data, provide a holistic and nuanced perspective on the post-internship phase for cadets at Sekolah Tinggi Ilmu Pelayaran Jakarta. The synthesis of qualitative and quantitative insights contributes to a robust academic understanding, offering valuable considerations for curriculum refinement and support services within maritime education.

4.2. Discussions
4.2.1. Navigating the seas of maritime education

The discussion section critically examines the significance of the results obtained from the synthesis of document analysis, interviews, and survey insights, presenting a comprehensive perspective on the post-internship phase for cadets at the Sekolah Tinggi Ilmu Pelayaran Jakarta. This discussion adheres to the academic and effective research standards, integrating current theories, references, and a comparative analysis to enhance the depth of understanding. Summary of main scientific results: the main scientific results highlight the efficacy of integrating theoretical and practical components in the curriculum, the pivotal role of vocational training, nuanced challenges in language proficiency, cadets' preferences for a balanced approach to technology integration, and the impact of geographical diversity on cultural adaptation. These results contribute to a holistic understanding of the post-internship phase and provide valuable insights for refining maritime education methodologies.

a. Relating results to original objectives: the results align closely with the original objectives outlined in the introduction. The research aimed to explore cadets' perspectives in the post-internship phase, specifically focusing on curriculum efficacy, vocational training, language proficiency, technology integration, and the influence of geographical diversity. The results effectively address these objectives, offering a nuanced and comprehensive exploration of each aspect.

b. Scientific interpretation of results: the positive reception of the integrated curriculum and vocational training underscores their crucial role in preparing cadets for the maritime industry. The adaptability of the curriculum, as evidenced by document analysis, interviews, and survey responses, facilitates a seamless transition from theoretical learning to practical application. Scientifically, this aligns with the principles of experiential learning and the importance of practical exposure in educational theories. The language proficiency challenges highlighted in the results necessitate a targeted approach to linguistic support within the curriculum. Scientifically, this aligns with the literature on language acquisition, emphasising the need for tailored language programs to address specific challenges faced by learners in technical and specialised fields. The nuanced preference for a balanced approach to technology integration reflects the complexity of learning preferences among cadets. Scientifically, this aligns with the cognitive theory of multimedia learning, emphasising the importance of a judicious mix of instructional methods to cater to diverse learning styles. The impact of geographical diversity on cultural adaptation, as revealed in the results, aligns with social identity theory, emphasising the positive aspects of diversity but acknowledging the challenges in effective communication due to cultural differences.

c. Consistency with previous research or theories: the results resonate with and extend existing literature in maritime education. The positive impact of integrated education and vocational training aligns with broader educational theories emphasising the effectiveness of experiential learning and practical...
exposure. The challenges in language proficiency mirror studies on language acquisition in specialised fields, emphasising the need for targeted language support. The nuanced perspective on technology integration adds a unique dimension to the discourse, challenging assumptions about the uniform acceptance of technology in education. This finding contributes to the ongoing debate on the optimal balance between traditional and technological instructional methods. The impact of geographical diversity on cultural adaptation is consistent with social identity theory and cultural psychology literature. The positive aspects of diversity align with studies emphasising the benefits of a multicultural environment, while the challenges reflect the complexities inherent in intercultural communication.

4.2.2. Implications and recommendations

The research findings and discussions provide valuable insights to improve maritime education at the Sekolah Tinggi Ilmu Pelayaran Jakarta. These insights suggest practical steps to refine curriculum design, offer targeted support, and create an inclusive learning environment. The implications of the research highlight several key areas for improvement. Firstly, there's a need for a holistic curriculum that integrates theoretical and practical components, regularly aligning with industry needs. Specialized language modules focusing on maritime terminology and communication skills are also recommended. Additionally, a balanced approach to technology integration, combining traditional methods with modern tools, is advised. Lastly, fostering diversity and inclusion through cultural sensitivity training and inclusive initiatives is essential. To enact these improvements, several recommendations are proposed. Continuous quality assurance mechanisms, including feedback loops and evaluations, should be established. Professional development opportunities for educators, such as industry workshops and conferences, are crucial. Strengthening partnerships with industry stakeholders and providing global exposure programs for cadets are also important. Lastly, enhancing technological infrastructure to support diverse learning needs is recommended. By implementing these recommendations, Sekolah Tinggi Ilmu Pelayaran Jakarta can enhance its maritime education programs, creating a dynamic and globally competitive learning environment for cadets.

5. CONCLUSION

This research delves into the post-internship phase for cadets at the Maritime Institute Jakarta, focusing on curriculum effectiveness, vocational training, language proficiency, technology use, and geographical diversity. It aims to understand cadets’ readiness for professional roles in the maritime industry. The integrated curriculum was found to be effective in bridging theoretical knowledge with practical skills. Vocational training was crucial in enhancing practical skills and preparedness for real-world challenges. Language proficiency challenges were identified, suggesting a need for targeted support. Cadets preferred a balanced approach to technology use, and geographical diversity impacted cultural adaptation. The findings have practical implications for curriculum refinement, language support, technology use, and creating a culturally sensitive learning environment, benefitting educators, administrators, and policymakers in maritime education. This study contributes significantly to effective maritime education, offering insights tailored to the field's unique demands. It addresses the gap between academic theory and industry needs. However, limitations such as the focus on a specific institution and reliance on self-reported data suggest caution in generalizing the results. Future research should include more maritime institutions for comparative analysis and explore the lasting effects of curriculum and training on graduates' careers. Additionally, examining specific language challenges and interventions would provide valuable insights. Recommendations include continuous curriculum refinement, targeted language support, and adaptive technology use, emphasizing the need for a balanced blend of theory and practice in maritime education to prepare cadets for success in a globalized industry.

REFERENCES

Enhancing global maritime education: a qualitative exploration of... (Marudut Bernadtua Simanjuntak)
BIOGRAPHIES OF AUTHORS

Marudut Bernaduia Simanjuntak is a doctoral student in Applied Linguistics Studies of Postgraduate Degree in Universitas Negeri Jakarta. He is also lecturer in Sekolah Tinggi Ilmu Pelayaran Jakarta in Department of Research. He is teaching Maritime Education, majorly in Maritime English, Literacy, and English for Deck & Engine Officers. He can be contacted at email: marudutbernaduiasimanjuntak_9906921013@mhs.unj.ac.id.

Zainal Rafli is a Professor of Language Education and Applied Linguistics in Universitas Negeri Jakarta. His field of specialization, expertise, research areas, publication and presentation cover a wide range of language education, applied linguistics, and language studies. He can be contacted at email: zainal.rafli@unj.ac.id.

Sintowati Rini Utami is an Associate Professor of Language Education in Universitas Negeri Jakarta. Her field of specialization, expertise, research areas, publication and presentation cover a wide range of language education, applied linguistics, and language studies, especially for Indonesian Language studies. She can be contacted at email: sintowati_riniutami@unj.ac.id.