Exploring TikTok as a Learning Resource in Maritime Higher Education: Educator Perspectives and Practices

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Abstract

While social media platforms have increasingly been adopted across various educational disciplines, less is known, from an empirical perspective, about their application within maritime higher education. This pioneering study examines the emerging phenomenon of TikTok use among maritime educators, representing one of the first empirical investigation into social media integration within this traditionally conservative field. A qualitative research design was employed, conducting semi-structured interviews with 12 maritime educators across international institutions who have begun creating TikTok content for educational purposes. Participants represented diverse maritime specializations including navigation, marine engineering, port operations, and maritime law. Interview data were analyzed using reflexive thematic analysis, revealing four key themes: (1) democratizing maritime knowledge beyond traditional maritime academies, (2) developing micro-learning approaches for complex shipboard procedures and emergency protocols, (3) engaging digitally native students entering the seafaring profession, and (4) navigating institutional resistance within hierarchical maritime education structures. The study reveals innovative educational practices including the use of TikTok's short-form video format to demonstrate intricate maritime procedures typically requiring hands-on shipboard experience, creation of virtual vessel walkthroughs for land-based students, and development of maritime safety mnemonics through engaging visual content. However, significant challenges emerged including concerns about maintaining the seriousness of maritime safety education while creating accessible content, preserving professional standards, and overcoming institutional skepticism within a field where tradition and hierarchy remain paramount. This groundbreaking research establishes foundational knowledge about social media's potential role in maritime education, offering crucial insights for maritime institutions considering digital pedagogical innovations in an increasingly technology-driven maritime industry.

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Introduction

The maritime industry stands at a critical juncture where traditional hierarchical structures intersect with rapidly evolving digital technologies. Maritime education, which prepares future seafarers, port operators, and maritime professionals, has historically adhered to conservative pedagogical approaches rooted in centuries-old traditions of apprenticeship, hands-on training, and strict adherence to safety protocols (Sharma et al., 2011). These conventional methods, while effective in maintaining industry standards and professional rigor, face mounting pressure to adapt to the expectations and learning preferences of digitally native students entering the profession (Manuel, 2017). As the maritime workforce undergoes generational transformation, educators increasingly confront the challenge of bridging the gap between time-honored instructional practices and contemporary digital engagement strategies. Of particular interest is the emerging adoption of social media platforms, specifically TikTok, within this traditionally conservative educational context, raising questions about how such platforms are being integrated into maritime teaching practices.

Literature Review

Social Media in Higher Education

Social media platforms have proliferated across educational contexts over the past decade, transforming how knowledge is created, shared, and consumed (Greenhow & Lewin, 2016). Platforms such as YouTube, Instagram, and Facebook have been widely adopted by educators across disciplines to enhance student engagement, facilitate informal learning, and democratize access to educational content (Manca & Ranieri, 2016). Research demonstrates that social media can support collaborative learning, foster communities of practice, and provide authentic audiences for student work (Carpenter & Krutka, 2015). However, challenges persist regarding privacy concerns, digital divide issues, platform sustainability, and the tension between informal communication norms and academic rigor (Selwyn, 2019).

Despite widespread adoption in many educational sectors, maritime education has remained notably resistant to social media integration, with limited empirical research examining digital innovation within this specialized field (Sellberg & Øvergård, 2022). The field's conservatism reflects concerns about maintaining the seriousness of safety-critical training, preserving professional standards, and navigating institutional structures where hierarchy and tradition remain paramount (Kitada et al., 2018). This resistance may stem from the high-stakes nature of maritime operations, where errors can result in loss of life, environmental disasters, and significant financial losses (Sellberg, 2018). Within this broader landscape of social media in education, one platform has emerged as particularly disruptive in its format and reach.

TikTok as an Educational Platform

TikTok has emerged as a particularly disruptive social media phenomenon, characterized by short-form video content, algorithmic content distribution, and predominantly youth-oriented user demographics (Anderson, 2020). While initially dismissed as entertainment-focused, TikTok has increasingly attracted educators who recognize its potential for micro-learning, visual demonstration, and reaching students through platforms they already inhabit (Escamilla-Fajardo et al., 2021). The platform's format, typically 15 to 60-second videos, aligns with cognitive science principles supporting chunked information delivery and spaced repetition (Jamet et al., 2008).

Recent scholarship has documented TikTok's educational applications across various disciplines, including language learning (Yang, 2020), science education (Barton & Ilić, 2021), medical education (Comp et al., 2021), and health promotion (Basch et al., 2021). These investigations reveal both promising pedagogical possibilities and significant challenges. TikTok enables creative knowledge dissemination, democratizes expert knowledge, and facilitates informal peer learning networks (Southgate, 2021). However, concerns include content accuracy, oversimplification of complex topics, the potential for misinformation, and questions about whether entertainment-focused platforms can maintain educational credibility (Zhu et al., 2020). Platform governance issues, data privacy concerns, and the ephemeral nature of social media trends raise questions about the sustainability of educational investments in TikTok (Cervi, 2021).

Existing research has focused predominantly on mainstream educational settings, with specialized professional education contexts remaining largely unexplored. This represents a significant gap given that professional education fields often face unique constraints and affordances that differ substantially from general higher education contexts. Maritime education exemplifies such a specialized context.

Maritime Education and Digital Technology

Maritime education presents a unique context for examining social media integration due to its distinctive characteristics. Unlike general higher education, maritime training combines academic instruction with practical skill development in safety-critical domains where errors can result in catastrophic consequences (Sellberg, 2018). The field operates within complex regulatory frameworks established by international bodies such as the International Maritime Organization, requiring standardized competencies and certification processes (Muirhead, 2020). Additionally, maritime education grapples with geographic dispersal, as students often complete portions of training aboard vessels at sea, creating challenges for sustained educational engagement (Gekara & Sampson, 2021).

The integration of digital technologies in maritime education has historically been limited to specific applications such as ship simulators, electronic navigation systems training, and maritime safety management systems (Baldauf et al., 2011). These technologies have enhanced technical skill development but have largely replicated traditional instructional models rather than fundamentally transforming pedagogical approaches. The COVID-19 pandemic accelerated some digital adoption, particularly regarding remote learning delivery (Burdová & Vujović, 2021), yet questions remain about whether this shift represents genuine pedagogical transformation or merely emergency adaptation.

Social media platforms, despite their ubiquity in students' personal lives, have seen minimal formal integration into maritime curricula. This reflects institutional reluctance to embrace tools perceived as informal, unprofessional, or incompatible with maritime education's serious purpose. Generational divides may also contribute to this resistance, as maritime educators often possess extensive sea-going experience and hold professional certifications earned through traditional training pathways (Kitada & Ölçer, 2015).

Gaps in Current Knowledge

Less is known, from an empirical perspective, about the intersection of TikTok adoption and maritime education practice. This gap is particularly significant for several reasons. First,

maritime education's conservative culture and safety-critical context provide a test case for understanding social media adoption in resistant institutional environments. Second, TikTok's particular affordances, such as visual demonstration capabilities and short-form format, may align with maritime education's emphasis on procedural knowledge and practical skill demonstration. Third, understanding how individual educators navigate institutional resistance to pedagogical innovation offers insights relevant to change processes in other conservative professional fields.

Maritime educators who adopt TikTok represent early adopters operating at the margins of institutional acceptability. Their experiences likely involve negotiating multiple tensions: between professional credibility and platform accessibility, between comprehensive instruction and brevity requirements, between institutional expectations and student engagement strategies, and between maintaining maritime education's serious purpose and leveraging creative, engaging content formats. Understanding how these educators experience and navigate these tensions remains unexplored territory.

The Purpose of This Study

The present study addresses these knowledge gaps by examining how maritime educators experience and navigate the integration of TikTok into their teaching practices within traditionally conservative maritime higher education contexts. By exploring the lived experiences of educators who have begun creating TikTok content for educational purposes, this research seeks to illuminate both the innovative practices emerging at the intersection of maritime education and social media, and the challenges these pioneers encounter within traditional institutional structures. This investigation extends the emerging literature on TikTok in education by examining its application within a specialized professional context characterized by unique constraints and affordances, while contributing to understanding digital innovation processes in conservative educational institutions.

Research Question

How do maritime educators experience and navigate the integration of TikTok into their teaching practices within traditionally conservative maritime higher education contexts?

Method

Design

This study employed a qualitative research design using semi-structured interviews to explore TikTok integration in maritime higher education. This approach was selected for its capacity to capture rich, contextual data regarding educators' experiences, motivations, and challenges in adopting social media platforms within a traditionally conservative academic field (Creswell & Poth, 2018).

Participants

Participants were recruited using purposive criterion sampling to identify maritime educators actively creating TikTok content for educational purposes (Campbell et al., 2020). Inclusion criteria required participants to be: (a) employed as educators at recognized maritime higher education institutions, (b) actively creating educational TikTok content for minimum six

months, and (c) able to participate in English-language interviews. Recruitment occurred through professional maritime education networks, social media platforms, and snowball sampling.

The final sample comprised 12 maritime educators from six countries (France, Myanmar, Thailand, Norway, Singapore, and Philippines) representing diverse specializations: navigation (n = 4), marine engineering (n = 3), port operations (n = 2), maritime law (n = 2), and maritime safety (n = 1). Teaching experience ranged from 3 to 22 years (M = 11.5, SD = 6.2), while TikTok content creation experience ranged from 6 months to 3 years (M = 16 months, SD = 8.4). The sample included nine male and three female participants. All participants held relevant professional maritime qualifications, with 10 holding master's degrees and two holding doctoral degrees. Sample size was determined by information power principles (Kyriakou et al., 2025; Malterud et al., 2016).

Data Collection

Semi-structured interviews were conducted via Zoom between January and April 2024. An interview guide addressed: (a) motivations for adopting TikTok, (b) pedagogical approaches and content creation strategies, (c) perceived benefits and learning outcomes, and (d) challenges and institutional responses. A pilot interview refined question clarity and flow. Interview duration ranged from 45 to 90 minutes (M = 62 minutes, SD = 12.8). The interviewer employed active listening, reflective probes, and follow-up questions to elicit detailed responses (McGrath et al., 2019). Field notes captured contextual observations and initial analytic impressions.

The first author transcribed all interviews verbatim, producing approximately 185,000 words of data. The second and third authors validated transcripts against recordings to verify accuracy. Discrepancies were resolved through consensus. All identifying information was removed and replaced with pseudonyms. Transcripts were uploaded to NVivo 12 for analysis.

Analytical Strategy

Data were analyzed using reflexive thematic analysis (Braun & Clarke, 2019; Clarke & Braun, 2017; Kyriakou et al., 2025), emphasizing researchers' active interpretive role in generating meaningful patterns. This approach suited the exploratory investigation of a novel phenomenon where theoretical frameworks remain underdeveloped.

Analysis proceeded iteratively through data immersion, systematic coding, theme development, and refinement. The first author engaged deeply with transcripts while documenting observations in analytic memos (Birks et al., 2008; Daher et al., 2025). Line-by-line coding captured both semantic content and latent meanings, generating 437 initial codes. All three authors then collaboratively reviewed, sorted, and clustered codes to identify broader patterns. Through intensive discussion sessions, the team interrogated candidate themes for coherence, distinctiveness, and meaningfulness. Themes underwent two-level review: first against coded extracts, then against the entire dataset, resulting in refinement, splitting, or collapsing of themes. Sub-themes captured nuanced variations within broader patterns. Each theme was clearly defined with attention to its unique contribution to understanding the phenomenon.

Ethical Considerations

Ethical approval was obtained from the Institutional Review Board at the International Executive School in Strasbourg, France. The research adhered to Declaration of Helsinki principles. All participants provided written informed consent after receiving detailed study information. Participants were informed of their right to withdraw at any time and to decline answering questions.

Confidentiality was maintained through: (a) pseudonym assignment, (b) secure storage of identifiable data on encrypted devices, (c) removal of identifying details from transcripts, and (d) restricted data access limited to the three authors. Additional care avoided including details that might identify participants through their public TikTok profiles or specialized expertise. Participants received no compensation but were offered study findings summaries. Data will be retained for five years post-publication before secure destruction.

Quality and Rigor

Multiple strategies enhanced credibility, dependability, and authenticity (Korstjens & Moser, 2018; Kyriakou et al., 2025; Tracy, 2010). All three authors independently developed preliminary coding frameworks before collaborative refinement. This investigator triangulation ensured multiple perspectives informed theme development, reducing individual bias. The first author maintained analytic memos documenting decision-making rationales and theme evolution, creating an audit trail. Four participants reviewed preliminary findings, confirming themes captured their experiences while contributing additional nuances (Candela, 2019). This member checking enhanced authenticity by ensuring interpretations aligned with participants' understandings. These strategies collectively strengthened confidence that findings authentically represented participants' perspectives while acknowledging the interpretive role of the research team.

Reflexivity

Building on these quality considerations, reflexivity involved critical reflection on how researcher backgrounds, assumptions, and positioning influenced all research stages (Haynes, 2021). The research team brought complementary backgrounds. Three of four authors had substantial maritime education experience, with two holding executive ship captain credentials. This insider positioning facilitated rapport-building and enabled nuanced interpretation of shipboard procedures, safety protocols, and industry-specific constraints. However, it also required conscious attention to potential assumptions and biases that could privilege perspectives aligned with the team's professional values or downplay criticisms of maritime education structures.

To mitigate this risk, the one author without maritime education background provided valuable outsider perspective, regularly questioning interpretations and challenging taken-for-granted assumptions. This created productive analytical tension, forcing the team to articulate and justify interpretations rather than relying on insider knowledge. The researchers' positive orientation toward educational technology required conscious attention to remain open to participants' expressions of concern or skepticism. The first author's reflexive journal documented instances where enthusiasm needed bracketing to appreciate institutional resistance and pedagogical tensions. Regular team meetings examined emerging interpretations, ensuring conclusions remained grounded in participant perspectives.

The team's shared maritime background also created potential for collective blind spots regarding taken-for-granted assumptions within maritime culture. The team actively questioned normative practices regarding hierarchical structures, gender dynamics, and resistance to innovation. The reflexive process involved ongoing interrogation of whether interpretations reflected participants' intended meanings or the research team's own professional socialization. While participants' experiences represented genuine realities of maritime education contexts, the researchers' analytical interpretations constituted one possible reading informed by particular theoretical perspectives and maritime professional knowledge. This acknowledgment of interpretive partiality situates findings appropriately within broader knowledge production about educational technology integration in specialized professional fields.

Results

Reflexive thematic analysis of interview data revealed four major themes that illuminate how maritime educators experience and navigate TikTok integration within traditionally conservative maritime higher education contexts. These themes capture both the innovative pedagogical practices emerging at this intersection and the significant challenges educators encounter. Table 1 provides an overview of the themes with illustrative excerpts.

Table 1
Summary of Findings

Theme	Description	Example Excerpt
Democratizing Maritime Knowledge Beyond Traditional Academies*	Expanding access to maritime education outside formal institutional boundaries	"I'm getting messages from kids in places like Mongolia, Paraguay, places nowhere near water, and they're asking me about becoming ship captains."
Developing Micro-Learning Approaches for Complex Shipboard Procedures and Emergency Protocols**	Adapting maritime instruction to short-form video format through innovative chunking strategies	"I'll do one video on just the breathing gear, that's it. Next one is how you approach the fire. Students aren't trying to remember 50 things at once anymore."
Engaging Digitally Native Students Entering the Seafaring Profession**	Connecting with students through their preferred digital platforms and communication styles	"My students are on their phones constantly. Like, why would I fight that? Just meet them where they already hang out."
Navigating Institutional Resistance Within Hierarchical Maritime Education Structures*	Confronting skepticism and policy ambiguity within conservative institutional contexts	"One of my senior colleagues actually said to me, you're turning maritime education into a joke by being on the same platform as teenagers doing dances."

Note. * Endorsed by all participants (n = 12). ** Endorsed by 10–11 participants.

Theme 1: Democratizing Maritime Knowledge Beyond Traditional Academies

TikTok emerged as a powerful mechanism for breaking down geographic and economic barriers that have historically limited access to maritime education. A navigation instructor captured this democratizing effect:

> I'm getting messages from kids in places like Mongolia, Paraguay, places nowhere near water, and they're asking me about becoming ship captains. That just wouldn't happen without TikTok. The algorithm puts my stuff in front of people who never would've stumbled onto maritime careers otherwise.

This experience resonated across the sample, with educators reporting unexpected audiences including teenagers exploring career options, adults considering career changes, and even active seafarers looking for quick refreshers.

A marine engineering educator explained:

> Our normal recruitment stuff reaches people already thinking about maritime careers. TikTok reaches people who didn't even know this world existed. I've had comments from folks saying they had no idea container ships were so massive or that maritime jobs paid so well.

This democratization also extended to family members of seafarers and coastal community members wanting to learn about the shipping industry's local economic impact.

However, tensions emerged around making specialized professional knowledge publicly accessible. One educator put it bluntly:

> There's a line, you know? A 60-second clip about emergency procedures can give someone a general idea, but it's not training. It can't be training. I always worry someone's gonna watch my video and think they actually know how to handle a real situation when they don't.

This concern about incomplete or misapplied knowledge was particularly acute for safety-critical content where partial understanding could lead to dangerous overconfidence.

Theme 2: Developing Micro-Learning Approaches for Complex Shipboard Procedures and Emergency Protocols

Creative strategies emerged for adapting complex maritime instruction to TikTok's short-form format. Rather than viewing time constraints as limiting, educators reframed them as opportunities to break down procedures into digestible pieces. A marine safety instructor detailed this approach:

> I'll do one video on just the breathing gear, that's it. Next one is how you approach the fire. Next one is extinguisher types. Students aren't trying to remember 50 things at once anymore. They can watch each piece multiple times, really nail it down, then move to the next part. It actually works better than the old way where we'd dump everything on them in one lecture.

The visual demonstration capabilities of TikTok proved particularly valuable for conveying procedural knowledge. One port operations educator explained:

> Before, I'd describe how to secure cargo or tie specific knots, maybe show some photos. Now I can literally film myself doing it on an actual ship. Students can see exactly how the rope moves, how much tension you need, the whole thing. It's so much better for learning hands-on skills.

TikTok's audio features enabled innovative safety mnemonics that leveraged the platform's trending sounds. A maritime law educator shared:

> I put SOLAS requirements to a popular audio track that was all over TikTok. Students told me they'd be walking around campus and the song would pop in their head and they'd suddenly remember the regulations. Is it conventional? Hell no. Does it work? Absolutely.

The format also addressed practical constraints faced by students at sea with limited internet access. One educator noted:

> Cadets on ships have terrible WiFi most of the time. They can't stream hour-long lectures or download huge files. But a 45-second video that reminds them how to do something specific? That actually works with their reality.

Theme 3: Engaging Digitally Native Students Entering the Seafaring Profession

TikTok facilitated meaningful connections with students who expect educational content to meet them in their digital spaces. A navigation instructor articulated this reality:

> My students are on their phones constantly. Like, why would I fight that? Just meet them where they already hang out. If they're scrolling TikTok for two hours a day anyway, I might as well put some navigation content in that feed.

Strategic use of TikTok supplemented rather than replaced classroom instruction. A marine engineering educator explained:

> I'll post a preview video before we cover a topic in class. Then after class, I'll post something that reinforces the key points. Students show up already having some idea what we're talking about, and then they've got the TikTok to go back to when they're studying. It's like bookends for the formal learning.

Several educators reported that students who engaged with their TikTok content participated more actively in class and asked more sophisticated questions.

The informal nature of TikTok helped break down traditional barriers between faculty and students. One educator shared:

> Students message me on TikTok asking questions they'd never ask in my office or in class. The whole vibe is different. It's less intimidating somehow. They feel comfortable just reaching out, and that leads to way better conversations about the material.

TikTok also enabled educators to showcase aspects of maritime careers that traditional materials missed. A port operations educator explained:

> I can show these massive container ships, the scale of the operations, how cutting-edge the technology is. Maritime jobs have this old-fashioned image problem, like it's all ancient sailors with no tech. TikTok lets me show students this is actually a modern, high-tech, globally connected industry.

Theme 4: Navigating Institutional Resistance Within Hierarchical Maritime Education Structures

Despite clear pedagogical benefits, significant pushback from institutions characterized all educators' experiences. This resistance manifested through absent or unclear policies and criticism from colleagues. A policy vacuum left many educators unsure of their institutional standing. One explained:

> My dean doesn't say I can't use TikTok, but there's definitely no support for it either. It's this weird gray area. So I do everything on my personal time with my own phone because I don't want them coming back later saying I shouldn't have been doing it on work time or using institutional resources.

Criticism from colleagues proved particularly difficult to navigate. A maritime law educator recounted:

> One of my senior colleagues actually said to me, you're turning maritime education into a joke by being on the same platform as teenagers doing dances. Like, he couldn't see past the dancing videos to understand there's actual educational value there.

Maintaining appropriate seriousness for safety content while making it engaging particularly troubled educators. One marine safety instructor wrestled with this:

> People die when safety procedures get screwed up. That's not exaggerating. So how do I make content about that engaging enough for TikTok without it feeling disrespectful or trivial? Sometimes I'll film something five or six times trying to get the tone right.

Generational divides compounded these challenges. One educator observed:

> There's definitely this attitude that real maritime educators earned their stripes through years at sea, not by having followers on social media. Some senior faculty treat my TikTok like it's proof I'm not serious about teaching.

Despite these obstacles, educators found ways to build legitimacy through evidence-based approaches. One navigation instructor explained:

> I started tracking how students who watched my TikToks did on practical exams compared to students who didn't. When I could show my department chair actual numbers proving the ones engaging with my content performed better, suddenly the conversation changed.

Connections with educators in other fields facing similar resistance provided valuable validation. One noted:

> Talking to a medical educator using TikTok or a science teacher doing the same thing helped me realize this isn't about maritime education being uniquely conservative. It's about institutions everywhere struggling with what legitimate teaching looks like when the platforms and tools are changing so fast.

Discussion

This study examined how maritime educators experience and navigate TikTok integration within traditionally conservative maritime higher education contexts. The four themes revealed through reflexive thematic analysis offer important insights into both the potential and challenges of social media adoption in professional education fields characterized by strong occupational cultures and safety imperatives.

The democratization of maritime knowledge beyond traditional academy boundaries carries significant implications for access and equity in professional education. TikTok's capacity to reach geographically dispersed and economically marginalized populations challenges the historic concentration of maritime education in specialized coastal institutions, potentially addressing longstanding barriers to entry in the seafaring profession. This democratization aligns with broader calls for educational equity and workforce development in maritime industries facing documented labor shortages (Gekara & Sampson, 2021). However, the tensions educators identified regarding oversimplification raise critical questions about knowledge stewardship and professional gatekeeping. The concern that brief videos might foster dangerous overconfidence in safety-critical procedures suggests that democratization without corresponding credentialing or competency verification mechanisms may introduce new risks (Hodgkinson-Williams & Trotter, 2020). Maritime education institutions may need to develop frameworks that acknowledge TikTok's value for awareness-raising while maintaining clear boundaries distinguishing informal exposure from formal professional qualification.

The innovative micro-learning approaches educators developed demonstrate how platform constraints can drive pedagogical creativity rather than merely limiting instructional possibilities. The alignment between TikTok's format and cognitive load theory principles suggests that effective educational practice may emerge from working with rather than against platform affordances (Leahy & Sweller, 2020). Virtual vessel tours and smartphone-filmed procedural demonstrations represent scalable, low-cost alternatives to expensive simulator training, potentially transforming how maritime skills are taught. The creative use of trending audio for safety mnemonics illustrates how educators can leverage viral culture and platform-specific features to enhance learning rather than viewing entertainment-oriented platforms as inherently incompatible with serious education (Southgate, 2021). However, institutions must carefully consider which competencies can be effectively addressed through micro-learning and which require more comprehensive instruction to avoid curricular fragmentation.

The enhanced engagement with digitally native students has important implications for maritime education's future viability. As generational turnover continues, maritime institutions must adapt pedagogical approaches to remain relevant to students whose media consumption habits differ substantially from previous generations (Parry, 2021). The finding that TikTok functions effectively as supplementary scaffolding challenges binary framings of traditional

versus digital pedagogy, suggesting successful integration involves strategic combination rather than wholesale replacement. The breakdown of hierarchical barriers between faculty and students through informal platform communication may facilitate more dynamic learning relationships. The capacity to showcase modern, technology-driven aspects of maritime careers addresses critical image problems that have hindered recruitment (Gekara & Sampson, 2021), suggesting digital platforms can serve important marketing functions beyond direct instruction.

The institutional resistance educators encountered reveals systemic challenges that extend beyond individual adoption decisions. The policy vacuum surrounding social media use reflects institutional governance structures struggling to keep pace with technological change, leaving early adopters professionally vulnerable while limiting institutional capacity to support effective innovations (Williamson, 2021). The colleague skepticism educators faced illuminates deeper conflicts about pedagogical authority and legitimacy in rapidly changing educational landscapes. The assumption that TikTok's association with entertainment precludes serious educational application reflects technological determinism that oversimplifies how platforms are actually used and fails to recognize educator agency in shaping platform practices (Escamilla-Fajardo et al., 2021). Generational divides between faculty raise important questions about professional development, faculty hiring, and knowledge transfer in maritime education.

The ethical tension around maintaining appropriate seriousness for safety-critical content while creating engaging material highlights how context matters profoundly in educational technology adoption. Maritime education's stakes differ meaningfully from many other educational contexts, and solutions cannot simply be imported from fields where errors carry less catastrophic potential (Sellberg & Øvergård, 2022). The strategies educators developed for navigating institutional resistance, particularly evidence-based documentation of learning outcomes, offer practical models for change agents in other conservative contexts (Trust et al., 2020).

Limitations and Future Research

Several limitations warrant consideration when interpreting these findings. The sample of 12 educators represents early adopters willing to experiment with TikTok despite institutional ambiguity or resistance. These educators may possess characteristics including higher technological fluency or greater tolerance for professional risk that distinguish them from the broader maritime education population. The sample's geographic distribution across six countries provided international perspectives but also introduced contextual variability in institutional cultures and regulatory frameworks. Data collection relied exclusively on educator self-reports without direct observation of TikTok content, student engagement patterns, or learning outcomes, limiting conclusions about actual educational effectiveness.

Future research should examine student perspectives on TikTok use in maritime education to understand learning experiences and perceived benefits from the learner viewpoint. Quantitative studies assessing relationships between TikTok engagement and measurable learning outcomes would provide crucial evidence regarding pedagogical effectiveness claims (Barana et al., 2021). Comparative research examining TikTok adoption across different professional education fields could identify whether patterns observed in maritime education reflect broader dynamics or represent field-specific phenomena. Longitudinal research tracking how institutional policies and pedagogical practices evolve as TikTok becomes more established could illuminate processes of digital innovation normalization. Investigation of

optimal content design principles for maritime education TikTok videos could provide practical guidance for educators (Ng & Ye, 2023). Research examining potential negative consequences including student overreliance on brief videos or development of superficial understanding would provide important counterbalance to predominantly positive findings reported here.

Conclusion

This study is one of the first to explore the integration of TikTok within maritime higher education, revealing how educators navigate the complex terrain between pedagogical innovation and institutional conservatism. The findings demonstrate that maritime educators are developing creative instructional strategies that leverage TikTok's unique affordances for democratizing access, facilitating micro-learning, and engaging digitally native students, while simultaneously confronting significant professional challenges including policy ambiguity, colleague skepticism, and concerns about maintaining appropriate seriousness for safety-critical content. As maritime education continues evolving to meet the demands of increasingly digital maritime industries and changing student populations, understanding how educators successfully integrate disruptive digital tools despite institutional resistance becomes crucial for the field's future. The experiences documented here offer valuable insights not only for maritime education stakeholders considering digital pedagogical innovations but also for other conservative professional fields grappling with how to balance tradition with innovation, rigor with accessibility, and preservation of core professional values with necessary adaptation to technological and generational change.

References

Anderson, K. E. (2020). Getting acquainted with social networks and apps: It is time to talk about TikTok. *Library Hi Tech News, 37*(4), 7–12. https://doi.org/10.1108/LHTN-01-2020-0001

Baldauf, M., Schröder-Hinrichs, J. U., Kataria, A., Benmessaoud, K., Benedict, K., & Tuschling, G. (2011). Multidisciplinary maritime simulation: The case for simulation governance. *WMU Journal of Maritime Affairs, 10*(1), 51–71. https://doi.org/10.1007/s13437-011-0004-x

Barana, A., Fissore, C., Marchisio, M., & Roman, F. (2021). Adaptive teaching in the COVID-19 pandemic: From the classroom to the online environment. *Journal of E-Learning and Knowledge Society, 17*(3), 28–37. https://doi.org/10.20368/1971-8829/1135499

Barton, G., & Ilić, N. (2021). Engaging with science through TikTok: An exploratory study. *Research in Science Education*. Advance online publication. https://doi.org/10.1007/s11165-021-10025-1

Basch, C. H., Zybert, P., Reeves, R., & Basch, C. E. (2021). What do popular TikTok videos say about the Pfizer COVID-19 vaccine? *Journal of Community Health, 46*(6), 1197–1200. https://doi.org/10.1007/s10900-021-01001-8

Birks, M., Chapman, Y., & Francis, K. (2008). Memoing in qualitative research: Probing data and processes. *Journal of Research in Nursing, 13*(1), 68–75. https://doi.org/10.1177/1744987107081254

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Burdová, I., & Vujović, A. (2021). E-learning in maritime education and training. *Transportation Research Procedia, 55*, 452–459. https://doi.org/10.1016/j.trpro.2021.07.005

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. *Journal of Research in Nursing, 25*(8), 652–661. https://doi.org/10.1177/1744987120927206

Candela, A. G. (2019). Exploring the function of member checking. *The Qualitative Report, 24*(3), 619–628. https://doi.org/10.46743/2160-3715/2019.3726

Carpenter, J. P., & Krutka, D. G. (2015). Engagement through microblogging: Educator professional development via Twitter. *Professional Development in Education, 41*(4), 707–728. https://doi.org/10.1080/19415257.2014.939294

Cervi, L. (2021). TikTok and generation Z: Understanding audience profile through in-depth interviews. *Observatorio, 15*(1), 84–101. https://doi.org/10.15847/obsOBS15120211753

Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology, 12*(3), 297–298. https://doi.org/10.1080/17439760.2016.1262613

Comp, G., Dyer, S., & Gottlieb, M. (2021). Is TikTok the next social media frontier for medicine? *AEM Education and Training, 5*(3), 1–5. https://doi.org/10.1002/aet2.10532

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Daher E., Kyriakou S., & Kyriakou Z. (2025). Distance Education During Times of War: Lebanese Students' Experiences Amid the Israel-Hezbollah Conflict. *The European Conference on Education 2025: Official Conference Proceedings* (pp. 105–119) https://doi.org/10.22492/issn.2188-1162.2025.10

Escamilla-Fajardo, P., Alguacil, M., & López-Carril, S. (2021). Incorporating TikTok in higher education: Pedagogical perspectives from a corporal expression sport sciences course. *Journal of Hospitality, Leisure, Sport & Tourism Education, 28*, 100302. https://doi.org/10.1016/j.jhlste.2021.100302

Gekara, V., & Sampson, H. (2021). Re-conceptualizing training for the maritime industry of the fourth industrial revolution. *Maritime Policy & Management, 48*(5), 675–691. https://doi.org/10.1080/03088839.2020.1790479

Greenhow, C., & Lewin, C. (2016). Social media and education: Reconceptualizing the boundaries of formal and informal learning. *Learning, Media and Technology, 41*(1), 6–30. https://doi.org/10.1080/17439884.2015.1064954

Haynes, K. (2021). Reflexivity in qualitative research. In G. Symon & C. Cassell (Eds.), *Qualitative organizational research: Core methods and current challenges* (pp. 73–89). SAGE Publications.

Hodgkinson-Williams, C. A., & Trotter, H. (2020). A social justice framework for understanding open educational resources and practices in the Global South. *Journal of Learning for Development, 7*(3), 204–222. https://doi.org/10.56059/jl4d.v7i3.428

Jamet, E., Gavota, M., & Quaireau, C. (2008). Attention guiding in multimedia learning. *Learning and Instruction, 18*(2), 135–145. https://doi.org/10.1016/j.learninstruc.2007.01.011

Kitada, M., Baldauf, M., Mannov, A., Svendsen, P. A., Baumler, R., Schröder-Hinrichs, J. U., Motz, F., Emad, G., Oliveira, M., & Dalaklis, D. (2018). Command of vessels in the era of digitalization. *Advanced in Human Aspects of Transportation, 786*, 339–350. https://doi.org/10.1007/978-3-319-93885-1_31

Kitada, M., & Ölçer, A. I. (2015). Managing people and technology: The challenge of seafarer demographics. *WMU Studies in Maritime Affairs, 3*, 149–172. https://doi.org/10.1007/978-3-662-45385-8_9

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice, 24*(1), 120–124. https://doi.org/10.1080/13814788.2017.1375092

Kyriakou, S., Tun, M. M., Kyriakou, Z., Naipaul, T., & Naipaul, J. (2025). Exploring the role of e-learning in career readiness: experiences of business students in Myanmar. *Asia Pacific Business Review*, 1–36. https://doi.org/10.1080/13602381.2025.2561153

Leahy, W., & Sweller, J. (2020). Cognitive load theory and the effects of transient information on the modality effect. *Instructional Science, 48*(1), 107–123. https://doi.org/10.1007/s11251-019-09501-5

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research, 26*(13), 1753–1760. https://doi.org/10.1177/1049732315617444

Manca, S., & Ranieri, M. (2016). Facebook and the others. Potentials and obstacles of social media for teaching in higher education. *Computers & Education, 95*, 216–230. https://doi.org/10.1016/j.compedu.2016.01.012

Manuel, M. E. (2017). Vocational and academic approaches to maritime education and training (MET): Trends, challenges and opportunities. *WMU Journal of Maritime Affairs, 16*(3), 473–483. https://doi.org/10.1007/s13437-017-0130-3

McGrath, C., Palmgren, P. J., & Liljedahl, M. (2019). Twelve tips for conducting qualitative research interviews. *Medical Teacher, 41*(9), 1002–1006. https://doi.org/10.1080/0142159X.2018.1497149

Muirhead, P. (2020). The evolution of the standards of training, certification, and watchkeeping (STCW) code. In J. Xu & V. Nikitakos (Eds.), *Maritime technology and engineering 3* (pp. 1–8). CRC Press.

Ng, D., & Ye, Y. (2023). TikTok as a pedagogical tool: Examining its affordances for teaching and learning in higher education. *Journal of Educational Technology Systems, 51*(3), 367–387. https://doi.org/10.1177/00472395221145608

Parry, E. (2021). How do generational cohorts differ in their attitudes toward work and organisations? In E. Parry & J. McCarthy (Eds.), *The Palgrave handbook of age diversity and work* (pp. 207–229). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-24135-3_10

Sellberg, C. (2018). From briefing, through scenario, to debriefing: The maritime instructor's work during simulator-based training. *Cognition, Technology & Work, 20*(1), 49–62. https://doi.org/10.1007/s10111-017-0446-y

Sellberg, C., & Øvergård, K. I. (2022). Interaction analysis as a tool for understanding technology-mediated learning in maritime education: Navigating the turn to online training in the COVID-19 pandemic. *Learning, Culture and Social Interaction, 34*, 100618. https://doi.org/10.1016/j.lcsi.2022.100618

Selwyn, N. (2019). What's the problem with learning analytics? *Journal of Learning Analytics, 6*(3), 11–19. https://doi.org/10.18608/jla.2019.63.3

Sharma, A., Kim, T. E., Gausdal, A. H., & Chae, C. J. (2011). Catching up with the West: An exploratory study on maritime education in the Philippines. *WMU Journal of Maritime Affairs, 10*(2), 129–138. https://doi.org/10.1007/s13437-011-0011-y

Southgate, E. (2021). A typology of altruism in STEM learning on TikTok. *Australasian Journal of Educational Technology, 37*(6), 30–47. https://doi.org/10.14742/ajet.7462

Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 837–851. https://doi.org/10.1177/1077800410383121

Trust, T., Carpenter, J. P., & Krutka, D. G. (2020). Moving beyond silos: Professional learning networks in higher education. *The Internet and Higher Education, 47*, 100759. https://doi.org/10.1016/j.iheduc.2020.100759

Williamson, B. (2021). Making markets through digital platforms: Pearson, edu-business, and the (e)valuation of higher education. *Critical Studies in Education, 62*(1), 50–66. https://doi.org/10.1080/17508487.2020.1737556

Yang, H. (2020). Secondary-school students' perspectives of utilizing Tik Tok for English learning in and beyond the EFL classroom. *3L: The Southeast Asian Journal of English Language Studies, 26*(4), 90–103. http://doi.org/10.17576/3L-2020-2604-07

Zhu, C., Xu, X., Zhang, W., Chen, J., & Evans, R. (2020). How health communication via Tik Tok makes a difference: A content analysis of Tik Tok accounts run by Chinese provincial health committees. *International Journal of Environmental Research and Public Health, 17*(1), 192. https://doi.org/10.3390/ijerph17010192