

Exploring the Familiarity and Interest of First-Year Nautical Science Cadets in Mobile Applications for Language Enhancement

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ABSTRACT

This study aims to examine how eager and effective cadets are while using mobile applications like “Say It,” “Talk English,” and “Speakometer” for language and vocabulary improvement. With the rapid digitization and the boom of mobile education applications, these tools that allow one to learn a desired language serve as a viable solution. The objective of the study is to determine the level of students’ knowledge and desire to integrate these applications within their academic routines. A combination of surveys and interviews to gather students’ insights, utilization patterns, and their perspectives on employing mobile applications during the language learning cycle will be employed.

1. Introduction.

In today’s digital age of education, there is a noticeable trend toward expanding the use of modern technology, allowing educators to further enhance traditional approaches to instruction. Language learning applications have emerged as valuable tools that are easy to use and engaging for language students. These programs may be particularly appealing to young learners – already accustomed to smartphones and other mobile devices – as they incorporate gamification, real-time feedback, and a more personalized learning experience. Because of its global nature and multinational staff, the maritime industry highlights the importance of being fluent, particularly in English. As everyone knows, English is the universal language

of the seas, and therefore, not only is it a standard for navigational science cadets but also a professional one, enabling them to perform duties such as comprehending and implementing safety protocols, working in various teams, and even dealing with high-stress operational environments. Language learning tools can be of invaluable assistance when addressing international barriers and ensuring marine cadets are able to secure the jobs they trained for.

Nonetheless, there has been insufficient journalism about the interests and levels of awareness of marine cadets about mobile language apps. First-year cadets studying at AMET (Academy of Maritime Education and Training) College Institute, where the study on *Talk English*, *Say It*, and *Speakometer* language apps was conducted, were closely studied for their attitude and mindset towards these applications. They were chosen for this study as they have specific attributes associated with each of them:

1. *Say It*: This application shows cadets how to voice words using phonetic visuals to improve their communication skills.
2. *Talk English*: Incorporates an extensive approach in regards to grammar, vocabulary and conversational skills to cadets who are willing to engage in becoming fluent in

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the desired language.

3. Speakometer: There is a strong accent on practical language use of the target language, assessing the speaking ability and providing recommendations on its improvement through artificial intelligence.

2. Objectives of the Study.

This research has two objectives. The first objective is to determine if cadets enrolled in the first year of the Nautical Science courses are aware of these applications and their characteristics. The second objective is to find out how willing they would be to use these tools during their normal learning routines. By doing this, the research intends to provide insight into the possible application of these tools in the Maritime English classroom and how they will enhance the linguistic capabilities of cadets studying Nautical Science courses.

3. Relevance of Language Learning for Nautical Science Students.

Within the maritime industry, good communication, encompassing safety concerns or otherwise, is of utmost importance. English is utilized in communication on board ships for safety procedures, running drills, and even dealing with emergencies, as the vessels have multinational crews. This implies that after graduation, the cadets have to work, and to be employed, they need to have engineering capabilities and command of a good level of English. Mobile phone applications offer different approaches for different problems to learners, such as decreased confidence while speaking, limited vocabulary, and incorrect pronunciation.

English proficiency amongst first-year cadets of AMET University, who are just beginning the programme, is not uniform. This is largely dependent on one's familiarity and prior schooling exposure to the language. With the use of mobile apps integrated into the learning system, a standardized yet flexible form of language development can be created. *Push to Stand Out*, *Say It*, and *Talk English* are some apps that can extend what is being taught in the classroom while encouraging cadets to work at their own pace. Such possibilities are particularly useful for cadets in developing long-term motivation and enhancing their abilities, as they allow cadets to track their own growth, identify areas to improve, and receive timely feedback.

4. Significance of the Study.

The findings of the study also apply to other spheres beyond the immediate context of the cadets in the first-year Nautical Science programme. Teachers and Academicians can make rational decisions regarding the introduction of information technologies into the process of education if they know how well and how interested cadets are in the use of the language learning computer programs. offers University the chance to modernize its instructional strategies and bring them into line with international developments in. Moreover, the research promotes

the discussion around the role of mobile applications in higher education, specifically in the marine studies field. It focuses on the significant role that technology can play in addressing skills gaps and employability in communication intensive domains. In doing so, it underscores the importance of continuing research and development.

5. Research Questions.

With a view to achieve its aim, the research seeks to answer the following questions:

1. How popular are *Say It*, *Talk English*, and *Speakometer*, mobile applications for learning languages, among the AMET University cadets in the first year of bachelors in Nautical Engineering?
2. How enthusiastic are these cadets toward the use of these applications in learning the language?
3. What features of their academic activity would encourage or discourage them towards the use of such aids?

6. Structure of the Study.

The following sections will be devoted to data collection methods of the research, analysis of the results obtained and discussion of the implications that these findings have. The results section will deal with findings obtained from the surveys and interviews done on the target group and the literature review will assist in conceptualizing the role of mobile applications in language learning. Finally, the conclusion will portray the main findings with the recommendations for the application of language learning applications in the teaching methods of AMET University.

7. Review of Literature.

Smith and Taylor (2022) focused on the effectiveness of MALL tools in enhancing the communication skills of undergraduate students. Mobile-assisted language learning enabled the cadets to speak and write with greater ease, confidence and self-assurance than ever before if they made use of gamified components, real time feedback, and individualised programs. The researchers pointed out that to maintain student focus, frequent usage and ease of access were critical features. Furthermore, they found out that MALL tools are most effective when used to complement classroom instruction rather than serve as a stand alone method.

AI integrated language learning mobile applications have become popular with the Singapore university students, and this was documented in the research carried out by Lee and Wong (2023). The research delved into the notion of AI enhancement tools like speech recognition and customized feedback in the acquisition of language skills. If cadets believed that the tools were effective in addressing their specific learning needs, then they would be likely to use them. The study also emphasized the necessity of enhancing the understanding of the benefits of

these applications because a large part of the target audience was not aware of their existence. They were able to conclude that the introduction of these devices in the educational process would facilitate the destruction of the barriers of their use and help the transition to a digital pedagogy in the tertiary education system.

Chandra and Das (2024) explored the effectiveness of mobile applications as a digital tool that can be used by marine cadets to enhance their communication skills. Their study also noted that the maritime cadets face particular challenges such as culturally diversified setting and technical language in the field and hence, the language training becomes requisite. The scholars realized that the use of *Speakometer* and *Talk English* aided cadets in addressing their issues with professional speech pronunciation. This ensured that cadets would not only be able to speak effortlessly but would also do so with great self-confidence. The study also underscored the need to combine the digital tools with content that is relevant to the industry, so as to enhance their applicability. Chandra and Das argued that universities should adopt a blended model of mobile applications and classroom learning to address the challenges of catering to the diverse needs of the maritime education today.

8. Methodology.

The aim of this study is to explore the perceptions and the level of interest towards language improvement mobile applications among a sample of 60 first year AMET University nautical science students, in particular the level of exposure to such applications. This study employs a mixed methods design, utilizing semi-structured interviews in order to gain qualitative data and questionnaires for quantitative data. The analysis will be done in a way that will include graphical data, where pie charts will be used to illustrate the preferences of cadets on mobile language applications.

8.1. Research Design.

Two main techniques are used in the study to acquire data:

1. Questionnaire: To gather quantitative information from the participants, a standardized questionnaire was created. Sections on demographic information (such as age, educational background, and previous exposure to English) are included in the questionnaire. Knowledge of applications for language learning. Interest and knowledge of the three chosen smartphone apps: *Speakometer*, *Say It*, and *Talk English*. Perceptions regarding the use of mobile applications for language learning. A mix of multiple-choice and Likert-scale questions were used to gauge responses.

2. Interviews as well as Application Display

To collect qualitative input, semi-structured interviews were used. In these sessions, the researcher presented the three smartphone applications and gave examples of their capabilities, including *Say It*'s pronunciation tools, *Talk English*'s conversational courses, and *Speakometer*'s AI-based feedback. Participants were given a brief opportunity to use the applications and express their opinions. The purpose of the interviews was to

delve deeper into attitudes, difficulties, and reasons that were not covered in the questionnaire.

8.2. Participants.

AMET University first-year nautical science cadets participated in the study. To guarantee a varied representation of cadets with differing degrees of English proficiency and exposure to digital learning resources, a purposive sample technique was employed.

8.3. Procedure.

1. Administration of Questionnaires - Participants received the questionnaire during a planned class period. To promote open communication, participants were given explicit instructions and guaranteed anonymity. Survey responses were gathered for examination.
2. App Demonstrations and Interviews- After the questionnaire session, a portion of the cadets took part in one-on-one interviews. The researcher gave the cadets an overview of the three chosen applications, outlined their salient characteristics, and let them experiment with them during these interviews. A thematic analysis was conducted using the recorded and transcribed participant responses.

8.4. Data Analysis.

1. Quantitative Analysis.

To ascertain the degrees of familiarity, usage, and interest in the chosen mobile applications, data from the questionnaires was examined. Key findings, including the percentage of cadets familiar with each app, were graphically represented using simple pie charts. Interest levels in utilizing these applications. Adoption-influencing factors include perceived efficacy, accessibility, and convenience of use.

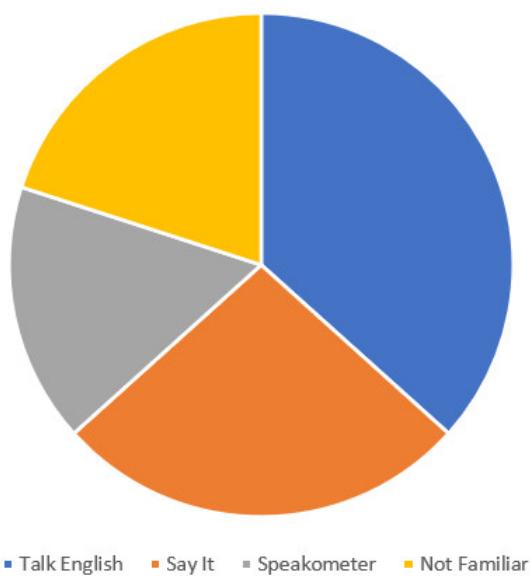
2. Qualitative Analysis.

To find recurrent themes, such as perceived advantages, difficulties, and recommendations for incorporating mobile apps into language learning, interview data were subjected to thematic analysis. To provide a thorough picture, the quantitative findings were supplemented by insights from the interviews.

9. Findings and Discussions.

Presenting quantitative data in pie charts makes the results easy to understand and highlights important patterns in students' interest in and familiarity with language learning apps. Additionally, this method makes comparisons simple and gives AMET University useful information.

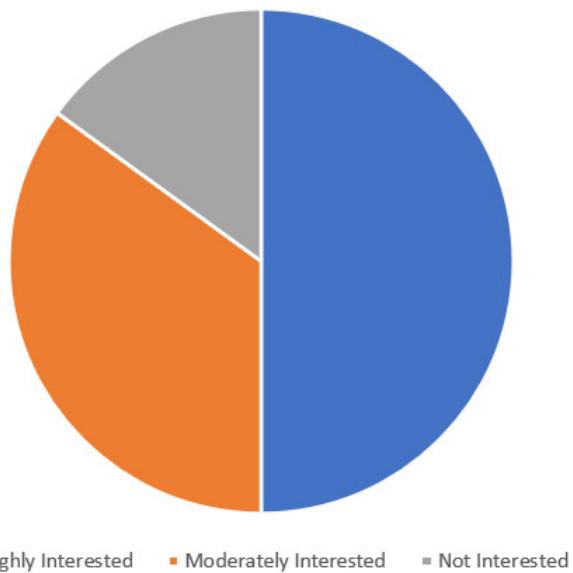
1. Level of Familiarity with Language Learning Applications.



Source: Authors.

The most well-known of the three applications, according to the statistics, is Talk English, which 55% of cadets are familiar with. Its relatively low visibility is highlighted by the fact that 40% of the cadets are familiar with it, whilst just 25% are familiar with Speakometer. Remarkably, 30% of the cadets said they had never used any of these programs, highlighting the necessity of increasing student exposure to and knowledge of these resources.

2. Cadets' Interest in Using Mobile Apps for Language Learning.

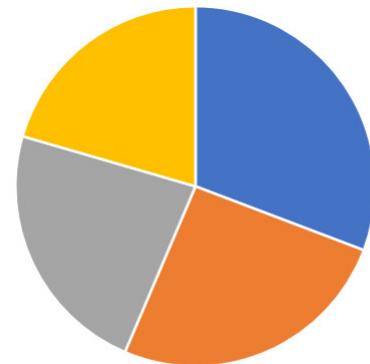


Source: Authors.

According to the research, students' interest in using mobile applications for language study is encouraging. Fifty percent said they were very interested, and thirty-five percent said they were moderately interested. The fact that just 15% of cadets ex-

pressed no interest suggests that they generally have a positive attitude about incorporating these tools into their daily learning routines. The potential for marketing mobile applications as additional educational tools for language improvement is shown by this research.

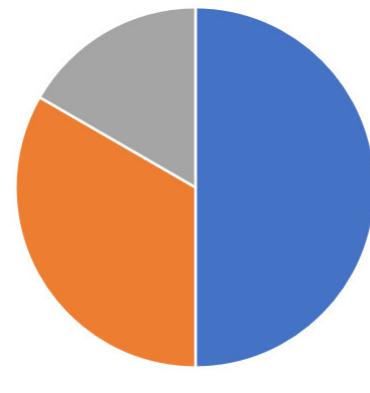
3. Features Cadets Value in Language Learning Applications.



Source: Authors.

60% of cadets emphasized the usefulness of real-time feedback as the most appreciated element of language learning software. At 50%, gamified learning came in second, demonstrating the popularity of dynamic and captivating forms. Furthermore, 40% said that personalized learning routes were an important consideration, and 45% valued user-friendly interfaces. According to these preferences, apps that combine these elements may be more successful in keeping students' attention and fostering their language development.

4. Challenges Faced by Cadets in Using Mobile Apps.

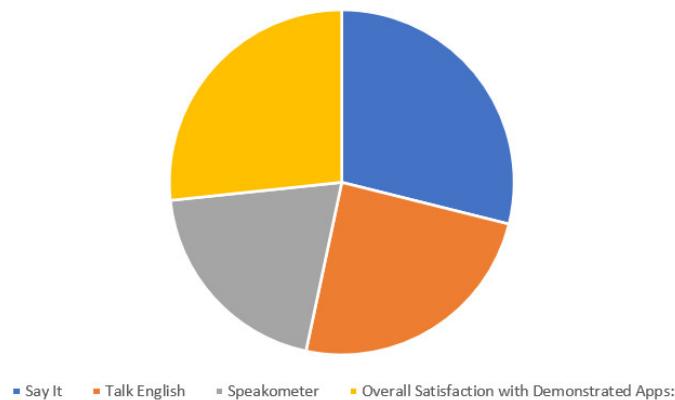


Source: Authors.

It has been stated by 40% of interviewees that students' unawareness is one of the main factors affecting the employment of mobile applications. Limited device or internet availability (30%) and having difficulty in understanding the functionalities of the app (20%) were the next two barriers reported. Other

obstacles were highlighted by ten percent of respondents, indicating some of the problems that need to be remedied through targeted strategies such as more effective training and resource provision.

5. Cadets' Feedback on the Effectiveness of Say It, Talk English, and Speakometer.



Source: Authors.

Based on student's feedback, the effectiveness of the three applications differed as well. It was reported that *Say it* is the best application with 65% of cadets praising it for the functionality aimed at the improvement of pronunciation. About 55% of cadets rated *Talk English* as well for providing in-depth coverage of vocabulary and grammar. Although the AI-based comments of *Speakometer* were appreciated by 45% of its users, it was significantly less liked because of other usability problems. Cadets report an average of 60% satisfaction with the shown applications which would mean that the applications may be able to aid in language acquisition if suggested changes are made to the curriculum for their effective integration into the classroom.

Conclusions.

This research has shown that mobile applications can play a significant role in helping AMET University first year cadets of nautical science in learning foreign languages. The analysis shows that a variety of tools and methods have different levels of recognition and *Talk English* is more popular than *Say It* and *Speakometer*. The exceptional interest demonstrated by the cadets to use these programs indicates tremendous willingness to incorporate technology for improving vocabulary, pronunciation or conversational fluency.

The research further outlines significant features that cadets consider important; gamification, instant feedback, and intuitive design. These features are some of the guiding principles for the selection and integration of mobile applications in the curriculum. However, on the other hand, some barriers like awareness issue, limited availability of materials, and difficulties in using and understanding the application may inhibit these technologies from working efficiently. More appropriate simplified application interface, better digital infrastructure

and better training will greatly improve acceptance and usage trends.

Another suitable alternative to use alongside conventional methods of language studies in maritime education is the employment of mobile applications. Incorporating such resources would provide cadets at AMET University with the interactive tools they require to develop their communication skills, which are essential for the global and multicultural maritime industry paradigm. Future strategies, on the other hand, must focus on the removal of raised concerns so as to offer significant and lasting educational benefits and the enhancement of awareness around the tools and their assessment processes.

Scope for Further Research.

A basis is created for the examination of the opportunities which mobile apps can offer in enhancing the mastery of language among cadets of nautical science and also reveals opportunities for future investigations in that respect. In line with these observations, other researches in the future can deal with the extent to which mobile applications may be designed for targeted enhancement of vocabulary and pronunciation and for development of other language proficiencies such as reading, writing, listening and speaking. This would enable researchers to cater for ethnolinguistic aspects relevant to marine cadets learning and thus formulate appropriate learning strategies and methods.

Additionally, the data collected to evaluate how interested cadets are and which features they like using can affect the development of systems tailored for more flexible learning environments. Through research, the short-term effects of including mobile applications in the curriculum on students' professional skills communication and preparedness for the global maritime industry can also be determined. Preferences should be incorporated into instructional strategies to make learning more successful and engaging, which will result in a more productive and student-centered learning environment. This paper also suggests cross-disciplinary research on how mobile language learning resources impact other professional development domains such as cultural competency, leadership, and teamwork. Such studies could give a comprehensive understanding of the role of digital resources in maritime education and help in developing innovative instructional strategies to meet the evolving needs of the sector.

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