

# E-BOOK OF EXTENDED ABSTRACT

## THE 14<sup>TH</sup> INTERNATIONAL INVENTION, INNOVATION & DESIGN COMPETITION 2025



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ENVIRONMENTAL • SOCIAL • GOVERNANCE



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INVENTION, INNOVATION &  
DESIGN COMPETITION 2025

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# SMART MUET APPLICATION: ENHANCING MUET PREPARATION THROUGH DIGITAL PLATFORMS

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## ABSTRACT

The Malaysian University English Test (MUET) plays a pivotal role in determining students' readiness for tertiary education in Malaysia, particularly in English language proficiency. As a standardised test, MUET assesses listening, speaking, reading, and writing skills, making it essential for students to prepare thoroughly. Traditionally, MUET preparation has relied heavily on printed textbooks and classroom-based instruction. While these methods provide foundational knowledge, they often fall short in terms of interactivity, adaptability, and student engagement. Many students find textbooks monotonous and rigid, lacking the dynamic features that cater to diverse learning styles and modern digital habits. To address these challenges, the Smart MUET application was developed as a digital learning platform tailored specifically for MUET preparation. This application integrates multimedia elements such as videos, quizzes, and interactive exercises to create a more engaging and flexible learning environment. It allows students to study at their own pace, access materials anytime and anywhere, and receive instant feedback on their progress. This study explores the effectiveness of the Smart MUET application in enhancing students' preparation experiences and outcomes. By evaluating user feedback and performance data, the study aims to determine whether digital tools like Smart MUET can offer a more effective and student-centred alternative to traditional preparation methods.

**Keywords:** MUET, Smart, digitalisation, student-centred

## 1. INTRODUCTION

The Malaysian University English Test (MUET) plays a pivotal role in determining students' readiness for tertiary education in Malaysia, particularly in English language proficiency. As a standardised test, MUET assesses listening, speaking, reading, and writing skills, making it essential for students to prepare thoroughly. Traditionally, MUET preparation has relied heavily on printed textbooks and classroom-based instruction. While these methods provide foundational knowledge, they often fall short in terms of interactivity, adaptability, and student engagement. Many students find textbooks monotonous and rigid, lacking the dynamic features that cater to diverse learning styles and modern digital habits.

To address these challenges, the Smart MUET application was developed as a digital learning platform tailored specifically for MUET preparation. This application integrates multimedia elements such as videos, quizzes, and interactive exercises to create a more engaging and flexible learning environment. It allows students to study at their own pace, access materials anytime and anywhere, and receive instant feedback on their progress. Figure 1 shows the interface of the application.

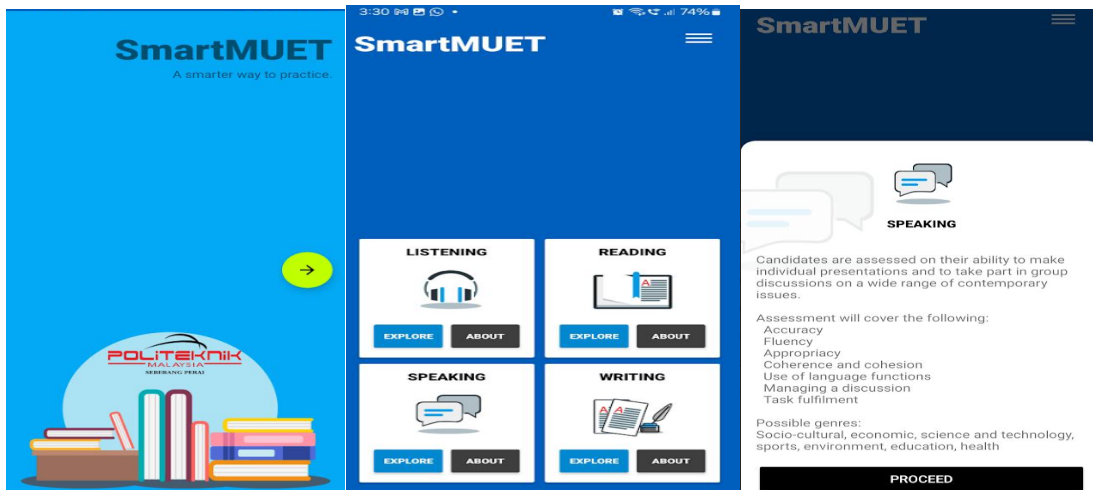


Figure 1 SMART MUET Interface

Hence, this study explores the effectiveness of the Smart MUET application in enhancing students' examination preparation experiences and outcomes. By evaluating user feedback and performance data, the study aims to determine whether digital tools like Smart MUET can offer a more effective and student-centred alternative to traditional preparation methods.

## 2. METHODOLOGY

This study employed a mixed-method approach to evaluate the effectiveness of the Smart MUET application in enhancing students' preparation for the Malaysian University English Test (MUET). A total of 50 students, all actively preparing for MUET, were selected as participants through purposive sampling. These students were given access to the Smart MUET application for four weeks, during which they used the application as their primary study tool.

Quantitative data were collected through structured surveys administered at the end of the pilot period. The survey included Likert-scale questions, focusing on usability, content quality, interactivity, and overall satisfaction. To complement the quantitative data, qualitative insights were gathered through semi-structured interviews with a subset of participants. These interviews explored students' personal experiences, preferences, and perceived benefits or challenges of using the application.

The data were analysed using descriptive statistics to identify trends in user satisfaction and engagement. Meanwhile, the qualitative data were thematically analysed to uncover recurring patterns and deeper insights into the user experience. This dual approach allowed for a comprehensive understanding of how the Smart MUET application influenced students' study habits, engagement levels, and perceived preparedness for the MUET examination.

## 2. FINDINGS

This study utilised a mixed-method approach involving 50 students preparing for the Malaysian University English Test (MUET). Participants used the Smart MUET application as their primary study tool over four weeks. Data collection included structured surveys and semi-structured interviews. The surveys assessed usability, content quality, and overall satisfaction, while interviews provided deeper insights into user experiences. Quantitative data were analyzed using descriptive statistics, and qualitative responses were thematically examined. This approach enabled a comprehensive evaluation of the app's effectiveness in enhancing student engagement, understanding, and convenience compared to traditional textbook-based preparation methods. Figures 1, 2 and 3 illustrates the distribution of responses from the surveys.

Table 1 : The distribution of responses for Usability, Content Quality, and Overall Satisfaction

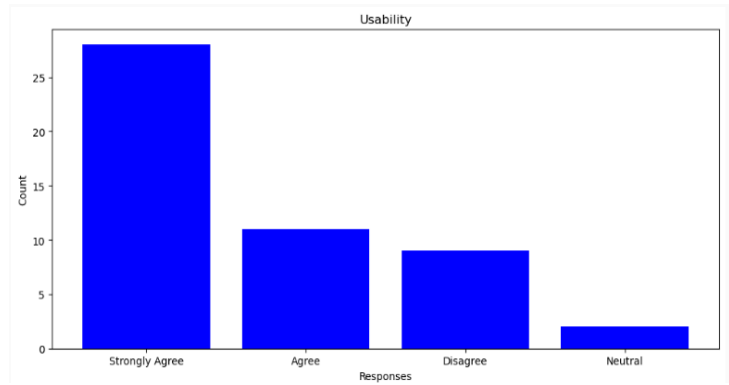


Figure 2 The distribution of responses for usability of Smart MUET

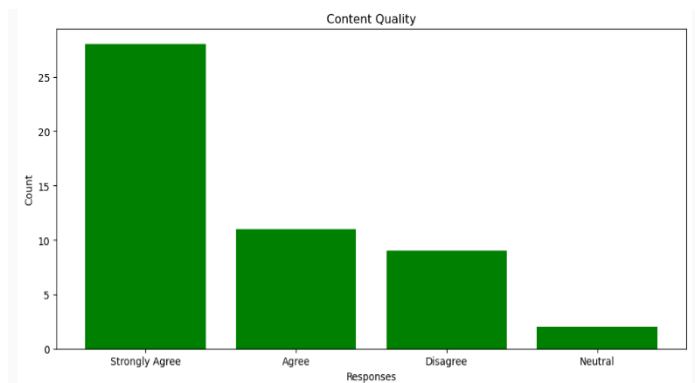


Figure 3 The distribution of responses for the Content Quality of Smart MUET

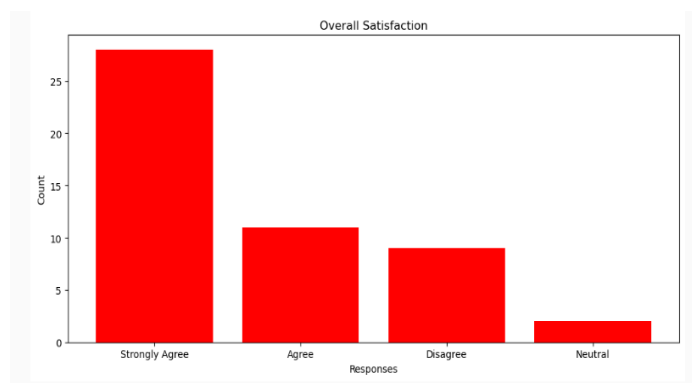


Figure 4 The distribution of responses for Overall Satisfaction of Smart MUET

#### 4. CONCLUSION

The findings of this study highlight the significant potential of the Smart MUET application in transforming how students prepare for the Malaysian University English Test (MUET). The application's interactive features, multimedia content, and flexible accessibility address many of the limitations associated with traditional textbook-based learning. With 85% of participants expressing a preference for the application and high percentages reporting improved engagement and understanding, the results suggest that digital platforms can offer a more effective and student-centred approach to exam preparation. The convenience of studying anytime and anywhere, combined with engaging content, contributed to a more positive and productive learning experience. These outcomes

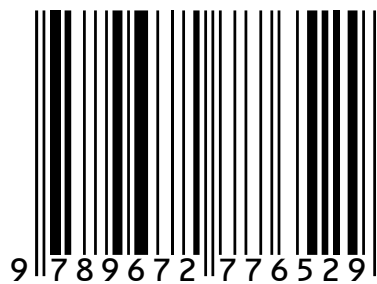
are particularly relevant for the Beta Generation, who are accustomed to digital tools and mobile learning environments. Therefore, this study recommends the broader integration of digital applications like Smart MUET into MUET preparation strategies and educational practices to enhance learning outcomes and better align with the needs of 21st-century learning..

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