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Preface

Pioneering Educational Perspectives: Series 2025 is a collection of thought-provoking insights and research contributions exploring contemporary educational trends and practices. This eBook presents a diverse range of perspectives on innovative teaching methodologies, digital learning strategies, and transformative approaches in education. Designed to serve as a resource for educators, researchers, and practitioners, it aims to inspire meaningful discussions and advancements in the field. Through carefully curated chapters, this publication offers fresh ideas and practical solutions to enhance learning experiences in an ever-evolving educational landscape.

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Nurul Wafa Wardina Rosli[1], Zazaleena Zakariah[2]*, Raudzatul Fathiyah Mohd Said[3] & Wan Safra Diyana Wan Abdul Ghani[4]

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ABSTRACT

STPM, or the Malaysian Higher School Certificate, is a pre-university exam in Malaysia, recognized internationally as equivalent to the GCE A-Level. This project focuses on Semester 2's topic related to Islamic History, concentrating on the Institusi Khalifah topic. It explores the election and contributions of various Khalifahs, including Abu Bakar, Umar al-Khattab, Umar Abdul Aziz, and Harun al-Rasyid. Students often struggle with recalling historical facts and understanding complex terminology, leading to short-term memory retention and difficulties in reading and writing. To address these challenges, the project proposes i-Khalif, an e-learning courseware based on persuasive system design principles like praise, liking, reminders, expertise, and self-monitoring. The project's goals are to identify the requirements for developing Islamic History e-learning for STPM, design and develop this courseware using persuasive design, and evaluate its functionality and usability. The courseware's effectiveness was tested through functionality testing, expert evaluation, and usability assessments. Results showed increased student engagement and enjoyment, highlighting the potential of persuasive design in creating effective e-learning systems across various subjects.

KEYWORDS: e-learning courseware, Education courseware, Education in Malaysia, Secondary school, STPM

PROBLEM AND OBJECTIVE

Students faced challenges in studying the Institusi Khalifah topic partly due to a lack of adequate modern tools catered to the topic. Further investigation related to the issue encountered challenges faced by teachers in adequately preparing their teaching materials before commencing teaching. The limitation of platforms in distributing and sharing teaching materials will hinder students' engagement and enthusiasm in studying the topic. One of the main problems STPM students face is that the materials use complex terminology and formal language, which is unfriendly and makes it difficult for students to understand historical events. Based on a preliminary investigation that has been conducted, the teachers agree that the published reference textbook is pre-university in nature, which can be categorized as unattractive. Studies proved that the absence of engaging teaching materials often results in student demotivation (Malek et al, 2019; Mansor & Masran, 2021; Antiporda, 2022). When educational content is uninteresting or fails to capture students' attention, they may struggle to connect with the subject matter, leading to decreased interest and effort (Mansor et al, 2022). Traditional materials that are overly complex, dry, or outdated can make learning feel like a chore, causing students to lose enthusiasm. This lack of motivation can hinder their ability to

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absorb and retain information, ultimately affecting their academic performance and overall learning experience. Engaging, interactive, and relevant materials are crucial in maintaining student interest and fostering a positive learning environment.

To tackle these challenges, the project introduces i-Khalif, an e-learning courseware developed using persuasive system design principles, such as praise, liking, reminders, expertise, and self-monitoring. The primary aim is to enhance student engagement and make learning Islamic History for STPM more effective and enjoyable. The project's objectives include identifying the specific requirements for developing this Islamic History e-learning courseware, followed by the design and development of i-Khalif using persuasive design principles. Finally, the project evaluates the courseware's functionality and usability to ensure it meets educational standards and effectively supports students in mastering the subject matter. By leveraging these design principles, i-Khalif aims to create an interactive and motivational learning experience, addressing the issues students face with traditional materials and promoting better retention and understanding of the content.

DESIGN DESCRIPTION

i-Khalif e-learning courseware marks a significant advancement by offering a modern alternative to traditional teaching methods that rely heavily on modules, slides, and textbooks. These conventional approaches often lack visual aids and interactive elements, making it difficult for students to recall historical facts and comprehend complex terminology. As a result, students may struggle to engage with abstract concepts and lengthy texts. In contrast, i-Khalif directly incorporates multimedia resources, including videos, interactive puzzles, and quizzes, into the learning experience. This integration provides visual representations of historical events, enhances comprehension, and promotes active learning through hands-on activities and instant feedback. By addressing the limitations of traditional materials, i-Khalif aims to improve students' retention and understanding of STPM history, making learning more accessible and engaging. Persuasive system design applied in i-Khalif increases student engagement through motivational elements like praise and interactive activities. It improves engagement with features such as reminders and self- monitoring, which help students stay on track and remember key concepts. Besides that, personalized learning experiences cater to individual needs, making content more relevant and effective. In addition, immediate feedback mechanisms aid in real-time learning corrections, while a positive emotional connection is fostered through friendly interfaces and supportive messages. Persuasive design guides students' behaviours and study habits, creating a more engaging, motivating, and effective learning environment.

VISUALS

Each i-Khalif e-learning courseware interface is thoughtfully designed to enhance user experience. The name i-Khalif and its full title, Institusi Khalifah, are prominently displayed for clarity. An animated character named Ruru greets users with audio, creating a welcoming and friendly atmosphere, rooted in affective design theory, which emphasizes emotional engagement in learning. Each page is provided with buttons that are necessary for user. Figure 1.0, 2.0, 3.0, 4.0,5.0 and 6.0 show samples of i-Khalif interfaces.

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Figure 1.0: Home page



Figure 2.0: Selection sub topic page



Figure 3.0: Learning material page



Figure 4.0: Learning material page



Figure 5.0: Learning material page



Figure 6.0: Result page

NOVELTY AND UNIQUENESS

i-Khalif e-learning courseware effectively addresses common challenges faced by students, such as difficulties in recalling historical facts, understanding complex terminology, and navigating formal language. The courseware simplifies complex concepts by offering structured learning materials, making them easier to grasp. Interactive quizzes and multimedia content further enhance comprehension and retention, allowing students to engage with the material more meaningfully. This approach not only aids in better understanding of the subject matter but also ensures that students can retain and recall important information more effectively, ultimately improving their overall academic performance.

BENEFITS TO MANKIND

i-Khalif e-learning courseware offers several benefits, particularly for STPM students. It provides a user-friendly platform tailored to their needs, making learning more accessible and efficient. The interactive and engaging nature of e-learning enhances understanding of

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historical facts, helping students grasp complex topics more effectively. Guided voice features simplify difficult concepts, further boosting understanding. Additionally, i-Khalif improves quality of life by allowing flexible study schedules and reducing stress. It also has a positive environmental impact by minimizing the need for physical resources like paper, contributing to sustainability efforts.

COMMERCIAL POTENTIAL

i-Khalif e-learning courseware is specifically designed for STPM students studying Islamic History, with a focus on the topic of Institusi Khalifah. It targets students who struggle with understanding and retaining concepts related to the Khalifah. Given its advantages, i-Khalif holds significant commercial potential. It is marketable and can be sold to schools, tutoring centers, and directly to students. The courseware's interactive activities and persuasive system design make it an appealing choice for buyers seeking effective study aids, offering a practical solution to enhance learning and retention in Islamic History.

CONCLUSION

i-Khalif e-learning courseware enhances education by offering tools that enrich the learning experience for both teachers and students. With features like an animated character, interactive quizzes, drag-and-drop exercises, and puzzles, the platform engages students and deepens their understanding of Institusi Khalifah. This not only aids teachers in presenting content but also keeps students motivated and focused during history lessons. Feedback gathered through functionality testing with test cases, expert evaluation, and usability testing indicates high satisfaction with i- Khalif. The courseware is recognized as a valuable e-learning tool, and ongoing feedback will drive future improvements to enhance its interactivity and user experience.

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