Preserving the Nation's Legacy Through Emerging Technology

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Abstract. The proverb is the legacy of the Malay people with special privileges in a speech that must be introduced to every generation so that this proverb will not be forgotten and never consumed by the ages. The role of the proverb in speech and writing is seen to less widely used in today's younger generation. In the school curriculum, the language taught in the syllabus. However, conventional teaching and learning techniques cause students to become bored and less attentive when teaching. A new approach has been developed to enhance students' interest in language learning. Ceritera Peribahasa Maya is a series of 3D digital proverbs storybook developed through the technology of the century. Ceritera Peribahasa Maya is a digital language learning approach that includes e-learning, teaching aids, learning and facilitating strategies and assessment tools. It applies Augmented Reality (AR) technology, QR Code, Google Cloud, and Gamification applications. Usability Testing of Virtual Speech measured in terms of user satisfaction. A mean of 4.87 for user satisfaction shows that Ceritera Peribahasa Maya is a great way to teach and learn digitally. This language innovation is a new turning point for teachers and students to realize the Malaysian Education Development Plan (PPPM 2013-2015) that emphasizes the aspect of ICT in learning. These applications are in line with modernity while preserving the integrity of the nation's heritage.

Keywords: Malay proverb, Virtual proverb story, 3D Digital storybook, Augmented Reality

1. Introduction
Malay proverb is one of the essential elements of expressing the thoughts and understanding of the Malays during communication[1]. It symbolizes the delicacy and superiority of the ancient Malay language of speech. The legacy of the Malays should preserve in the fast-paced era of modern technology.

An innovation study has been created to preserve the nation's heritage. The study of such innovations is known as Ceritera Peribahasa Maya. This proverb virtual storybook is a series of legends that can read manually or as 3D virtual objects [2]. Ceritera Peribahasa Maya is a series of digital proverbs 3D digital book developed through the technology of the century. It is across three disciplines of language integration, thinking map, and information and communication technology (ICT). It built through a digital learning approach that includes e-learning, teaching aids, teaching and learning strategies, and as an assessment tool. The development of Ceritera Peribahasa Maya was by
free software either through computer applications or smartphone applications. It applies Augmented Reality (AR) technology, QR Code, Google Cloud, and Gamification applications. Users can read books traditionally, such as reading daily storybooks, and users can also access information through the technology provided in each illustration. Users need to scan using their smartphones for more detailed information on the proverbial content behind the illustrations.

2. Problem Statement
The present generation (native digital generation) more compatible with communication through emergence technology than to use speech and handwriting[3]. These generations are more influenced and proud of the foreign culture that is so different from our ancestral heritage.

In the school curriculum, language is one of the most valuable elements of the Malay language curriculum. Often students misinterpret the meaning implied in the exam questions in the form of a proverb. Students do not understand the proverb well because they cannot understand the meaning of the proverb[4]. Students are more likely to memorize the meaning of a proverb than to understand the implied meaning.

Strategies and techniques in teaching and learning in schools also need to be concerned seriously. The enjoyment of learning should emphasize in tandem with the development of a more sophisticated modern age with the use of gadgets and modern technology just at the fingertips[5]. These modern gadgets and technology have become predominant determinants of socioeconomic status and is not only vastly popular amongst teenagers and young adults but are fast spreading across all generations[6].

As a result, Ceritera Peribahasa Maya is created to draw students' attention and interest in language learning. The fun of learning is so valuable that the knowledge presented is more engaging and meaningful. Indirectly, the preservation of the Malay heritage will continue to blossom and will last forever.

2.1 Research Objective
We investigate and as well as explore new technologies available for preserving the cultural heritage of the nation so that it continues to grow in the present. The new idea is a Virtual Proverb Digital Book created through the use of the emerging technology of the century.

3. Research Methodology
The method attempts to solve the problem following a two-step process: the development of the Ceritera Peribahasa Maya and the usability testing of the Ceritera Peribahasa Maya:

i. The development of Ceritera Peribahasa Maya based on the ADDIE model. The methodology used to develop this software based on the ADDIE Teaching Design Model. The ADDIE model is known as the generic model, which is the standard for digital material development[7]. The ADDIE acronym stands for Analysis, Design, Development, Implementation, and Evaluation. The model comprises five main phases, namely Analysis, Design, Development, Implementation, and Evaluation[8].

ii. The Usability Testing of Ceritera Peribahasa Maya through a questionnaire instrument. The questionnaire instrument was used to test the satisfaction of students against Ceritera Peribahasa Maya. Satisfaction is the level of comfort when using a system[9]. Consumers are interested and satisfied using the 3D digital book.

4. Result and Discussion
These experiments have illustrated two things:

i. The Findings of the development of Ceritera Peribahasa Maya. Ceritera Peribahasa Maya across the three disciplines that are a combination of proverbs, thinking maps, and information and communication technology (ICT). Bear
in mind that the graphic design of the book shown in Figure 1 corresponds to the main page.

Ceritera Peribahasa Maya is traditionally readable (authentic), and users can scan every page digitally. It will appear as a virtual object through Augmented Reality (AR) technology[10]. Augmented Reality (AR) is a technology that enables the virtual object display[11]. On the real-world scene, each page in this storybook can be scanned using a smartphone to learn more about the synopsis of each story series and other linguistic information [12].

The use of Augmented Reality technology (Figure 2) allows virtual objects viewed in three-dimensional (3D) form. The use of QR Code technology (Figure 2) in High Order Thinking Skills (HOTS) activities indicates that thinkings maps should apply as a virtual thinking tool. Google Cloud technology (Figure 3) is used through the teaching and learning strategies of teachers with students in the classroom or out of the classroom. The latest technology in this Ceritera Peribahasa Maya is Gamification technology (Figure 4) which can be an enjoyable assessment tool that involves quizzes while playing.

Figure 1. Ceritera Peribahasa Maya Main Page
ii. Usability Testing of *Cerita Peribahasa Maya*

In this section, we present a detailed evaluation of the results of usability testing *Cerita Peribahasa Maya*. We analyzed data collected from the questionnaire, which collected data from 49 school students. Here, the results of the satisfaction score for virtual proverb is 4.87.
Based on the interpretation of the mean scores, it shows that the user satisfaction to the 3D digital book is very high. This means the students agree the *Ceritera Peribahasa Maya* provides the fun and convenience of learning to understand proverbs through modern technology. This finding indicates that the VR simulation system contributes to higher satisfaction on user interactive learning and operation efficiency and thus can be used to enhance user experience. Arguably, the proposed VR simulation system could provide valuable insight into the digital user experience in relevant fields [13-14]

![Percentage Satisfaction Chart Against Ceritera Peribahasa Maya](image)

**Figure 5.** Percentage Satisfaction Chart Against *Ceritera Peribahasa Maya*

Figure 5 is a bar chart of the percent distribution of satisfaction students using the Ceritera Peribahasa Maya. The results showed that 99.22% of students agreed that the *Ceritera Peribahasa Maya* provides fun and satisfaction in teaching and learning.

| No | Comments and Suggestions |
|----|--------------------------|
| 1. | It shows that *Ceritera Peribahasa Maya* tests our thinking skills and improve our knowledge and bring us closer to our classmates and teachers. |
| 2. | We like *Ceritera Peribahasa Maya* because it uses IT, which is part of 21st-century education. We hope teachers in this school use this method for teaching and learning. |
| 3. | *Ceritera Peribahasa Maya* is so nice and enjoyable. It helps us with new proverbs, and it also uses the internet. |
| 4. | We like this way of learning using technology. We hope to learn through technology every day and year. |

Table 1 shows some of the comments and suggestions made by the students on the use of *Ceritera Peribahasa Maya* in teaching and learning. The positive feedback from students clearly shows that the
Z generation (the generation born from 1998 to 2009) is in dire need of this technology in today's teaching and learning.

5. Conclusion
The application of emerging technology has created an exciting and enjoyable environment for teaching and learning. The study showed that 21st-century technology is capable of changing the perception of the Z generation that the cultural heritage of the nation preserved and it remains intact despite the emergence of new technologies [15]. The findings show that modern technology has the potential to make a massive impact on this generation. Our hope is with the application of the Ceritera Peribahasa Maya will maintain the subtlety of the language and at the same time, improve the level of Malay knowledge.

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