

Intercountry Multiliteracy Program (Unismuh Makassar, Indonesia - Association of Education Cultural International (AECI) Thailand) Through Technology Approach Based on Infinite Architecture Web Application (IA Tech) and Virtual Reality Exploration

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ABSTRACT : The state of low literacy has an impact on knowledge and understanding of cultural literacy. The impact of the declining awareness of preserving local cultural literacy is the loss of identity and identity of a nation. Therefore, it is necessary to increase public awareness, especially the younger generation, about the importance of understanding literacy including cultural literacy and technological literacy. Optimization of Technology Based on Infinite Architecture Web Applications (IA Tech) and Virtual Reality Exploration is one solution through the concept of developing multiliteracy understanding between technology and culture, the current technological advances are very advanced and become a tool for cultural recognition through the concept of virtual reality by presenting real views in different dimensions, Virtual Reality puts forward the concept of Interaction, and Imagination, this is the basis for increasing understanding of multiliteracy so that it can contribute to increasing literacy.

Keywords - Multiliteracy, Virtual reality, Literacy

1. INTRODUCTION

Optimization of Technology Based on Infinite Architecture Web Applications (IA Tech) and Virtual Reality Exploration is one solution through the concept of developing multi-literacy understanding between technology and culture, the current technological advances are very advanced and become a tool for introducing literacy through the concept of virtual reality, According to (Suryani, 2016) Virtual Reality (VR) is a medium of interaction between humans and computers in a virtual form that can present the effect of real feelings through various feedback such as virtual channel sensors, aura, touch, smell and so on.

In addition, the development of Virtual Reality involves multidisciplinary computer science such as computer graphics, image processing, pattern recognition and artificial intelligence, networking, and multimedia. Further

explained Virtual Reality puts forward the concept of 3I, namely: Immersion, Interaction, and Imagination. Immersion is the aspect of feeling one's own presence in the digital environment that is built. Interaction is the way users communicate with the Virtual Reality system in a 3D environment. Imagination is the ability of virtual system developers to convey the concept of thought into virtual reality products.

One study of the application of Virtual Reality technology as a medium of learning the history of Indonesian independence by using historical settings through real reality in technology (Sihite et al., 2013). This virtual reality produces a concept that emphasizes on making users as if they see directly the building and setting where the historical event occurred. In addition, this community service activity with the topic of introducing multioperation through the Infinite Architecture application is also in line with one of the goals of the Sustainable Development Goals (SDGs), namely Goal Number 11: "Make cities and human settlements inclusive, safe, resilient and sustainable". This is because by introducing and preserving literacy through the Infinite Architecture application, it can increase public awareness about the importance of maintaining literacy, including cultural literacy by preserving the culture and architecture of the traditional house area. In this way, it can strengthen the identity and identity of a nation, and maintain cultural diversity in each nation.

2. HEADINGS

Multiliteracy is a concept that encompasses one's ability to communicate, understand and participate in different forms of language and media. It involves more than just reading and writing in the form of traditional printed texts, but also includes media literacy, digital literacy, visual literacy and other literacies. In the era of rapidly developing information technology, multiliteracy is becoming increasingly important as people rely on various media to get information and communicate. The concept of multiliteracy emphasizes that understanding and using different forms of literacy are becoming critical skills needed to function effectively in an increasingly complex and diverse environment. It also includes an understanding of different ways of communicating, such as interpreting messages through interacting images, videos, sounds and texts.

Abidin, Y. (2015) explains that Multiliteracy is a design that can be used to understand various types of texts and various forms of media generated from various new technologies through a pedagogical concept that gives teachers/lecturers the opportunity to convey information to students using forms of text and media, Multiliteracy is a new paradigm in literacy learning. The concept of multiliteracy arises because humans do not only read or write, but they read and write with certain genres that involve social, cultural, and political goals that are guided by the era of globalization, so this is the basis for the birth of multiliteracy in the world of education according to the explanation of Nopilda, L., & Kristiawan, M. (2018).

Nopilda, L., & Kristiawan, M. (2018) describe the development of the concept of multiliteracy in the world of education is actually inseparable from art-based concepts, multiple ways of knowing, and multi-intelligence which have been proven to develop student creativity, develop skills in technology and communication and understand socio-cultural differences. Kusuma, (2019) also argues in his research that Along with the development of information and communication technology, the definition of literacy has also experienced further development, namely literacy in the fifth generation. The term literacy in the fifth generation is also known as multiliteracy. The term multiliteracy implies the skill of using a variety of ways to express and understand ideas and information, using conventional forms of text as well as innovative texts, symbols, and multimedia.

Kurniawati, J., & Baroroh, S. (2016) elaborate on the Definition of Media Literacy is a skill we can be like that, but like all skills, can be improved. If we don't care about the importance of mass media in creating and maintaining a culture that will help define our lives, this is a skill that must be improved. A detailed explanation related to literacy is also explained by Muttaqin, M. F., & Rizkiyah, H. (2022) in his research with the explanation that Literacy is more than just reading and writing, but includes thinking skills using sources of knowledge in print, visual, digital, and auditory forms. Literacy can be translated into *Basic Literacy*, *Library Literacy*, *Media Literacy*, *Technology Literacy*, *Visual Literacy*, Literacy can be understood as an ability to speak one's language

or convey something (listening, speaking, reading, and writing) to interact in different ways according to the purpose.

Knowledge about Literacy from each country is increasingly threatened with fading due to various factors such as the influence of globalization, modernization, and technological advances that make the younger generation less interested in preserving the culture that is increasingly disappearing. Many cultures and traditions are neglected and forgotten by the community, due to a lack of knowledge and understanding of these cultures. The impact of the declining awareness of preserving local culture is the loss of identity and identity of a nation. In addition, cultural diversity which is the wealth of every nation is also threatened with extinction. Therefore, it is necessary to increase public awareness, especially the younger generation, about the importance of preserving local culture.

3. INDENTATIONS AND EQUATIONS

The method used in the implementation of the Program is a participatory method in the sense that the proposing team and partners are pro-actively involved in each activity. The proposing team and partners will collaborate directly where partners and the implementation team will carry out development in Indonesia and be actively involved in identifying the needs or solutions to the problems to be solved. Furthermore, the proposing team and partners design and make technology media technology including virtual web 3D Virtual Modelling.

Steps to Identify and Measure Partner Problems, this stage was carried out by interacting directly with the local community and related partners to identify problems faced in preserving culture. Some of the problems identified include the lack of public awareness about the importance of preserving culture, the lack of access to information about culture, and the lack of support from the government in preserving culture between countries.

Strategic Steps Realization of activities, this stage contains a design for measuring and evaluating the results of activities. Evaluation is carried out to evaluate the extent to which the activities that have been carried out have succeeded in achieving the expected goals and positive impacts. In addition, the evaluation is also carried out to find out whether the solutions provided are effective and efficient and can be applied sustainably.

Activity Evaluation Design This stage is done by determining the fields and solutions that are the targets of community service implementation. In this case, the target to be achieved is to increase public awareness about the importance of preserving culture between countries. The solution offered is through cultural recognition training using the Infinite Architecture web application, with a web application system for the introduction of culture and architecture of traditional house areas based on Virtual Reality exploration (Sihite et al., 2013).

Solution Core Activity, this stage is carried out by determining the fields and solutions that are the targets of community service implementation. In this case, the target to be achieved is to increase public awareness about the importance of multiculturalism in preserving culture in several countries. The solution offered is through multi-cultural cultural introduction training using the Infinite Architecture web application, with a Virtual Reality Exploration-based cultural introduction web application system. Virtual Reality as a learning medium has also been applied to national monuments in Indonesia (Wardijono et al., 2015). The advantage possessed by this research is the ability to invite users to explore the Virtual Area with many historical monuments that have been duplicated into 3D objects.

4. FIGURES AND TABLES

Based on information and observations that have been made during the service process carried out on the 4th to the 9th of May 2023 at Eakkapa Sasanawich Islamic School Thailand which is under the auspices of the Association of Education Cultural International (AECI) Thailand, provides several factors that can cause a decrease in awareness of cultural preservation in Thailand. One of these factors is the influence of globalization and modernization which makes the younger generation less interested in preserving local



(School Atmosphere of Eakkapa Sasanawich Islamic School, Krabi Thailand)

During the implementation of the service to the younger siblings of Eakkapa Sasanawich Islamic School students, we received additional information related to the lack of literacy about the importance of preserving local culture and this is a contributing factor to the decline in awareness of cultural preservation, there are several types of literacy that we demonstrate to students through Infinite Architecture Web Application-Based

Technology including:

- Language Literacy: The ability to understand and use language effectively in a variety of forms, such as written, spoken, or visual
- Media Literacy: Ability to access, analyze, evaluate and create media messages across multiple platforms.
- Digital Literacy: Proficiency in using digital tools, technology and online platforms to access, evaluate, create and communicate information effectively.
- Cultural Literacy: Understand and appreciate different cultural practices, norms, values and perspectives.

Information Literacy: Skills to locate, evaluate and effectively use information from a variety of sources while understanding ethical and legal considerations

The result from observations that have been made, there are several factors that can cause a decrease in awareness of cultural preservation in Indonesia. One of these factors is the influence of globalization and modernization which makes the younger generation less interested in preserving local culture. In addition, the lack of education and understanding of the importance of preserving local culture is also a contributing factor to the decline in awareness. The decline in awareness of cultural preservation can also be caused by economic factors and inadequate infrastructure. Lack of support from the government and lack of access to information about cultural preservation can also be a contributing factor to the decline in awareness.

After carrying out this service, we conclude that the Optimization of Technology Based on Infinite Architecture Web Applications (IA Tech) and Virtual Reality Exploration can be one solution through the concept of developing multi-cultural understanding between technology and culture, our current technology is very advanced and can be a tool for cultural recognition through the concept of virtual reality by presenting real views in different dimensions.

The final result of community service activities is the existence of cooperation as evidenced by the signing of the MOU and MOA as the basis for cooperation with partners and the Muhammadiyah Makassar university and the Association of Education Cultural International (AECI) with a joint role responsible for the implementation of advanced mentoring activities for participants in the Intercountry Multiliteracy Program (Unismuh Makassar, Indonesia - Association of Education Cultural International (AECI) Thailand) Through Web Application-Based Technology Approach Infinite Architecture (IA Tech) and Virtual Reality Exploration.



(The atmosphere of the material presentation process on Infinite Architecture (IA Tech) and Virtual Reality Exploration on improving student literacy)

5. CONCLUSION

A conclusion of this activity come to the limitation of the local language, namely Thai, is the main obstacle in the process of implementing the service, during the exposure process to students also experienced a few obstacles because the material presented used English and the students still had limitations in English. However, the help of partners in this case the teacher as a translator of the material made it easier during the activity implementation process.

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How to cite this article: [Wahyuddin](#), [Syahban Nur](#), [Hamzah](#), [Niyameelah tamanga](#), Intercountry Multiliteracy Program (Unismuh Makassar, Indonesia - Association of Education Cultural International (AECI) Thailand) Through Technology Approach Based on Infinite Architecture Web Application (IA Tech) and Virtual Reality Exploration. *Asian. Jour. Social. Scie. Mgmt. Tech.* 2023; 5(5): 57-62.