Unleashing the Power of Unplugged Computational Thinking : The Art of Crafting Creative Stories"

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ABSTRACT

The study investigated the use of unplugged computational thinking skills in an English Language Proficiency Course, (JUE 300) among 25 students over eight weeks, with a focus on achieving SDG 4 (Quality Education). The study was conducted in a face to face immersive environment using brainstorming and story mapping activities to develop short stories that uses unplugged computational thinking (CT) concepts such as decomposition, pattern recognition, abstraction and algorithm. The incorporation of SDG 4 into this study highlights the importance of preparing students for 21st century learning, and the positive impact that CT concepts can have on their creative writing processes. The students' ability to produce authentic and original short stories has been enhanced by the integration of CT concepts, emphasizing the importance of promoting critical thinking skills and creativity in education. By incorporating SDG 4 into this study, the results demonstrate how educators can help to provide quality education and prepare students for success in the modern workforce.

OBJECTIVE

1. Analyze written text with good understanding.
2. Present ideas clearly and effectively in written communication.

ADDED VALUES

- ❖ The computational thinking concept is in line with 21st century learning skills which includes communication, collaboration , critical thinking and creative thinking skills.
- ❖ The pedagogical approach can be implemented to contextualize assignments.
- ❖ To avoid "silence plagiarism" that has been growing since AI models, like Chatgpt, Jasper AI, Kipper AI were introduced into the education stream

USEFULNESS

Unplugged computational thinking process

- ❖ Provides a structure and a systematic approach to write short stories. It gives a structure and guide to budding writers to produce authentic,
- ❖ Motivates and increases engagement in producing original short stories without depending on AI and other online writing tools
- ❖ This concept can be implemented in remote rural regions with limited internet connectivity.

COMMERCIALIZATION POTENTIAL

Develop education tools that teaches computational thinking concepts to be used in writing classrooms.
e.g (designing of mobile application and websites)

Computational Thinking Concepts

01	Decomposition: Breaking down concepts such as characters, themes, settings and plot
02	Pattern Recognition: To make connections and predictions between characters and events to the world around them..
03	Abstraction: Creating visual representations of the story to see the big picture
04	Algorithm: Sequence of actions that a character takes in a particular order to reach a desired outcome or resolve an issue.

RECOGNITION

1. GIGvaganza in Tertiary Education: A Holistic Learning design for ESL Learners in Learning Grammar in the Creative and Innovative teaching and learning of Languages (2018).

2. International Virtual Educational Design,Innovation competition, Universiti Teknologi Mara, International Virtual Educational Design,Invention& Innovation Competiton, 2022 (International).

4. Creative & Innovative Teaching and Learning of Language (CInTELL) entitled' The Efficiency of Global Classroom in the Teaching of Mandarin Language'

3. Enhancing Higher Impact research and Innovation in the new norm, Institute Teacher of Education Sultan Abdul Halim Campus, Sungai Petani, Kedah, Malaysia , SAH iconferenceEd, 2022 (National).

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