

## ***ABSTRACT***

*Digital educational games are one example of technology that is currently very fond of being used by kindergarten teachers with the aim that the material taught or given to students can be more easily understood. By utilizing the features in digital educational games, researchers intend to make the game "Miner Quest" with the hope that this game can provide knowledge or knowledge to early childhood about mining materials. Like games in general, this game also has obstacles to be able to complete or win by giving bosses or strong monsters at the end of each level and focusing on mining education.*

*This game is designed by utilizing the finite state machine method on non-Playable Character (NPC). This method focuses on the player's choice in completing each mission in the game. In general, the appearance that will be presented by this game uses source references from the Mario Bros 2 game, with additional missions to get a lot of mining products (coal and nickel).*

*The results obtained from this research are the application of the finite state machine (FSM) method to the development of NPCs in general or specifically the boss golem is very suitable, the results of the functional testing of the NPC boss golem are in accordance with the initial design, besides that the results of user testing show that this game is feasible and still accepted by teachers, parents and kindergarten children with some notes in the form of further development made mobile version, 3D version display, and additional features of game play time restrictions.*

***Keywords:*** *Game, Educational Game, Finite State Machine, NPC, Mining Products.*