Development of 3D virtual classroom models for improve online learning interactivity

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ABSTRACT

The world of education is experiencing a very significant impact of the Covid-19 pandemic. Online learning is a solution in overcoming learning limitations due to social distancing. Researchers developed a 3d virtual classroom using a Minecraft model to increase online learning interactivity. The 3 (three) dimensional virtual classroom model design that has been developed has received respondents' acceptance of 90.00% in the "Very Eligible" category. Testing the entrance feature before entering the building or classroom, the seat or table position selection feature, the attendance record feature, and the avatar customization feature got a percentage of 90.83% with the "Very Eligible" category to produce a sense of presence. In the interactivity test, the aspect of character interaction is 89.17% in the "Very Eligible" category. The level of effectiveness of the continuity of online learning using the 3D virtual classroom model tested gets a percentage of 89.17% with the "Very Eligible" category. In addition, the test uses an average score of SUS (System Usability Scale) of 73.67, so it can be concluded that the 3D virtual classroom model is "acceptable" as an online learning medium.

Kata Kunci: *3D virtual classroom, minecraft, system usability scale, interactivity, online*