Investigating the Effectiveness of Distance Teaching Across Countries to Enhance Student's Problem-Solving Skill Through Computational Thinking Learning Settings

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ABSTRACT

Since 2020, due to pandemic covid-19 spread out around the world make online learning common in education. The transformation from classical into online learning challenges the education system and teachers to do extraordinary thinking. Material and quality of learning environment in online learning keep the priority on developing distance teaching techniques. The 21st-century skill was sounded a long time ago, pointed in development future skills. One of the skills is Computational Thinking (CT) becomes one of attracting skill development in education. How to provide an appropriate learning environment in the development of Computational Thinking skill becomes a challenge, especially in online learning activities. This study has the objectives of investigating the effectiveness of distance teaching through student's engagement and enhancement of problem-solving. This study conducts an Experimental method approach with treatments on class. The statistical analysis included descriptive analysis, and t-test analysis will be employed to address the research question. The result show that instructional design and procedures used in this study effectively improve students' ability to solve problems and use the computational thinking paradigm. There is an increase in problem-solving and computational thinking from the average value of the experimental class by two points, but the difference test (t-test) shows a significant difference.

Kata Kunci: *distance teaching, online learning, computational thinking, problem solving*