

Student Adaptive Reasoning in Problem Solving based on Cognitive Styles of Field Dependent.

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- **Abstract:** Adaptive reasoning is related to problem-solving because it serves as a determinant of the correctness of problem-solving strategies. Adaptive reasoning abilities depend on the individual's cognitive style to solve problems. The purpose is to describe the adaptive reasoning abilities in mathematical problemsolving on cognitive styles, namely a field-dependent (FD) cognitive style. This research is an exploratory qualitative approach that a descriptions procedure of observed behaviors of of observed behaviors of subjects. The research instruments used were the Group Embedded Graphics Test (GEFT) and interview guidelines. We analyzed based on students' adaptive reasoning in their activities to solve mathematical problems. Especially are understanding the problem, planning the solution, carrying out the plan, and reexamining the solution. The results showed that adaptive reasoning of the subject in problem-solving using the stages Polya indicated adaptive reasoning abilities in every aspect. Students are incomplete write all the information, computations are still inaccurate, and making errors in computing and using formulas.
- **Keywords:** Adaptive, strategies, reasoning, cognitive, FD, GEFT, computations.