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# EFFECT OF FORMATIVE FEEDBACK ON THE METACOGNITIVE DEBUGGING STRATEGY USING POLLING TECHNOLOGIES

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## **Abstract**

The metacognitive debugging process is a cognition regulation strategy that is carried out by the student to recognize weaknesses in learning and adjust strategies to improve his/her performance. The effects of formative feedback on the metacognitive debugging strategy of participants were examined using the experimental method in an online course of pedagogical practice. A total of 300 responses obtained in the application of the MAI instrument of 60 students (20 in the control group, 20 in the experimental group (Individual) and 20 in another experimental group (Collaborative)) were quantitatively analyzed. The results revealed that using formative feedback significantly affects the metacognitive debugging strategy of the students: (1) The level of debugging strategy used in the experimental groups was significantly higher than the control group; (2) Teacher-Student feedback (collaborative group) showed better results for the debugging strategy. The groups that received formative feedback showed a positive effect on academic performance.