

# **Improving Collaboration and Communication Skills Through Integrated Problem-Project Based Online Learning in MPP Courses**

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## **ABSTRACT**

The research aims to improve communication skills, collaboration and find patterns of classroom action research in online-based learning. The results of the research will be followed up and corrected cyclically so that in the long term, students who are skilled in character (1) communicate effectively both verbally and in writing, (2) are able to collaborate synergistically even though they are separated in space. The long-term impact of this research is the growth of a tolerant character, an attitude of appreciating the speech lawn, skilled in communicating in verbal and written language, skilled in collaborating, critical thinking, creative and innovative.

The research subjects were students of Informatics Engineering Education class E 5th semester who took the Educational Research Methodology (MPP) course, the type of research was classroom action research. Observation of learning activities in offline learning is replaced with observation of evidence of activity in the form of discussion results in collaborating to solve problems in online discussion forums. Indicators of increased collaboration in addition to increasing the frequency of participation are also seen from the quality of participation results. Likewise in the observation of communication skills. The research was carried out by utilizing Besmart e-learning as a place for students to take various learning support facilities including discussion forums, links to related learning resources, teaching materials and learning resources, learning media, a place to collect assignments. In addition, WhatsApp groups are also used for coordination and consultation, googlemeet and vicon.

The results of collaboration skills in the good category. The increase in collaboration skills was 15.15%, the largest consecutive increase was 23.2% commitment, 19.43% responsibility, 14.52% accountability. Improved effective collaboration skills through increased communication and speed in completing tasks. Communication skills in the good category. The biggest increase from cycle 1 to cycle 2 was 12.9%. Communication skills experienced the highest increase in successively 30% material mastery, 11.27% use of standard language. Items that need to be improved are explaining skills, effective sentence arrangement and paragraph development. The problem-based approach is part of the project completion stage. The project is in the form of a research proposal which is also a bill for learning outcomes for MPP courses. All students have succeeded in compiling a research proposal.

*Kata Kunci: Problem-Based Learning, Online Learning, Improving Communication and Collaboration Skills.*