# ABSTRACT

Mathematical representation ability are needed by students to understand mathematical concepts and their relationships. The Covid-19 pandemic makes distance learning becoming the best option right now. To help improving students' mathematical representation ability and carry out distance learning, a learning model is needed, namely the *Connected Mathematics Project* assisted by *Schoology*. This study aims to analyze the learning quality of *Connected Mathematics Project* assisted by *Schoology* on mathematical representation ability and analyze mathematical representation ability viewed from students independence.

The population in this study were students of class XI Financial Accounting and Institution Competence of SMK Negeri 2 Pekalongan year 2020/2021. The research method uses a mixed method with an strategy concurrent embedded. Quantitative data analysis was carried out with a mathematical representation ability test and analyzed to determine the quality of learning. Qualitative data analysis describing mathematical representation ability viewed from student independence.

The results showed that students' mathematical representation ability with learning *Connected Mathematics Project* assisted by *Schoology* were better than PBL learning. Of the three aspects of mathematical representation ability, students who have low independence are still less able to choose, apply, and translate mathematical representations to solve problems, while the other two aspects are in the capable category. Students who have medium independence have been able to create and use representations to organize, record, and communicate mathematical ideas, while the other two aspects in the category are quite capable. Students with high independence have achieved proficiency in all three aspects of mathematical representation ability.