**ABSTRAK**

**Linda (2015). "Application of Project-Based Learning (PBL) to Enhance Understanding of Mathematical Ability of High School Students)", SPs UNPAS, Bandung.**

This research aims to reveal whether Project-Based Learning (PPA) can improve students' mathematical understanding,to determine the activities of teachers and students in Project-Based Learning (PPA) and to determine the students' responses toward learning Project-Based Learning (PPA) .. The method of this research is mixed method (combination of quantitative & qualitative) that used the Embedded design. The study population was all students SMA N 2 Gunungputri Bogor with sample class XI students were chosen at random and devided into two groups. The experimental group gained Project-Based Learning and the control group gained Expository Learning. To get the research data used instrument in the form mathematical comprehension ability test, guidelines for observation, interview, questionnaire scale. The data were analyzed quantitatively and qualitatively. Quantitative analysis was conducted on the pre test, post test, and N gain. To determine the average value of the difference between the experimental group and control group performed by t-test . Qualitative analysis was performed to examine students' responses toward Project-Based Learning. The results showed that increased understanding of the mathematical ability of students who receive Project-Based Learning is better than students who get the Expository Learning, and students’ response to the implementation of Project-Based Learning is positive.

Keywords: Project-Based Learning application in teaching mathematics , the ability students to understand mathematics