

**PENCAPAIAN KOMPETENSI MAHASISWA D3 TEKNIK ELEKTRO  
PADA MATA KULIAH PRAKTEK SISTEM MIKROPROSESOR  
DENGAN METODE PEMBELAJARAN  
COOPERATIVE LEARNING TIPE JIGSAW**

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**Abstract:** This study uses development research approach, that is, the development of learning equipment in the form of practical lab-sheet and experiment research by trying the learning equipment resulted from real learning with cooperative learning method of jigsaw type. The purposes of this study are: (1) to obtain a learning equipment in the form of lab-sheet which is suitable to cooperative method of jigsaw type; and (2) to increase the competence achievement of electrical engineering diploma student, Engineering Faculty of Yogyakarta State University, in microprocessor practice program, indicated by the increase of the amount of student getting minimum B grade and graduation percentages. This study includes several steps: (1) Observation, that is evaluation to the available problems which may cause the low level of competence achievement of electrical engineering diploma student in Microprocessor program; (2) Planning, that is to plan the right learning strategy suitable to the observation result question that is cooperative learning model of jigsaw type; (3) the Development of learning equipment (lab-sheet), that is to develop lab-sheet as the main learning equipment in Laboratory appropriate to cooperative learning method of jigsaw type; (4) Learning experiment, that is by a valid learning equipment practiced in the real class which is in microprocessor practice program of Electrical Engineering Diploma Student, Engineering Faculty of Yogyakarta State University, in short semester 2006-2007; and (5) Evaluation, that is by conducting analysis of the existing shortage as perfection material for the next lecture and also as recommendation to the implementation of other lectures in the program with a typical characteristics. The result of the study shows that there is a high increase in the competence achievement indicated by the increase in graduation percentage from 75% to 95%, and the distribution of minimum B grade increasing from 60% to 85%.

**Key words :** Cooperative learning, Jigsaw

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