## ABSTRACT

The aim of the current study was to investigate the effect of task complexity on students' spoken performance in terms of complexity, accuracy and fluency (CAF) and the relationship between students' perception of the task complexity and students' spoken/oral performance in terms of CAF. The subjects were the eighth grade students of SMPN 21 Bandar Lampung consisting of 30 students. The tasks in the form of dialogue were used to elicit the data. The result of the research showed that, The simple task complexity with manipulating task complexity along with two dimensions resource-directing (+few elements, +here and now, +no reasoning demands) and resource-depleting (+planning time, +single task, +prior knowledge) can be used to increase the students' complexity (syntactic and lexical complexity) and fluency on students' spoken performance. On the other hands, the complex task complexity with manipulating task complexity along two dimensions resource-directing (-few elements, -here and now, -reasoning demands) and resource-depleting (-planning time, -single task, prior knowledge) can be used to increase the students' accuracy and complexity but decreased the fluency on students' spoken performance. Besides that, the students had problems in performing the task not only because of the level of task complexity (cognitive factors), but also because of the other factors such as task difficulty (learner factors e.g., confidence, motivation). This research suggested teachers to design a task with simple and complex of task complexity to improve students' achievement in terms of complexity, accuracy, and fluency. Besides, it is expected that this study can inspire other researchers to have further research about task complexity.

**Key words:** *TBLT*, *task complexity, resource-directing and resource-depleting, CAF, students' perception.*