

Applying Transcript Based Lesson Analysis in Enhancing Communication Pattern between Teacher and Students in Chemistry Classroom

Abstract: Transcript Based Lesson Analysis (TBLA) is a transcript-based learning analysis method developed at Nagoya University, Japan. This new method is believed to justify the success of instructional design planned by the teacher. So far, the success of learning design has been reflected in student learning outcomes, even though the learning outcome data are not sufficient to provide an overview of the actual classroom conditions. This study aims to analyse the communication patterns in learning Chemistry using the TBLA method. This research is a descriptive qualitative study that analysed the lesson of Chemical Bonds and Carbon Atoms Characteristics, which were conducted in two Senior High Schools in South Kalimantan, Indonesia. The data were collected using observation and documentation study. The lessons recorded using cameras and camcorders devices were transcribed and analysed using the Excel program based on the number of words spoken by teachers and students and the frequency of keywords in learning chemistry. The data were transformed into graphs. The results showed that analysis using TBLA provided integrated information about communication patterns and classroom quality. In these two classes, communication pattern occurs in Chemistry learning was teacher-student interaction only. The multi-ways transactions pattern has not occurred. The low quality of teacher questions and the incomplete deep learning phase in learning chemistry caused the expected multi-directional transaction communication has not been conducted. The result implies that TBLA is an effective tool to reflect on teacher practices and improve their teaching process for better instructional practices.

Keywords: *communication pattern, transcript-based lesson analysis, chemistry learning, teacher-student interaction*