ABSTRACT

MARIO ADITYA PRASETYO. Analysis of Students' Chemical Literacy to Learning Electrolyte and Non-electrolyte Solutions with an Ethnopedagogical Approach. Mini Thesis, Chemistry Education, Faculty of Mathematics and Natural Sciences, Universitas Negeri Jakarta. June 2021.

The purpose of this study was to develop and apply an ethnopedagogical learning model in chemistry learning to analyze chemical literacy and cultural identity on electrolyte and nonelectrolyte solutions learning materials. This research was conducted at SMA Negeri 5 Palembang in the even semester of the 2020/2021 academic year with the research subject consisting of 36 students of class X IPA 1. The study was conducted using qualitative analysis methods by collecting data through observation, reflective journals, interview with teachers, laboratory assistants, and students, as well as a chemical literacy test. Chemistry learning is carried out using an ethnopedagogical approach which consists of five stages, namely self-identification, content integration, collaboration, dialogue, and reflection. Furthermore, the learning stage is carried out by analyzing the chemical literacy of students. The results of the chemical literacy analysis of students showed that in the aspect of general scientific ideas they can conduct scientific investigations of Palembang cultural products by identifying, submitting opinions to explain phenomena, and trying to generalize findings through identification of the electrical conductivity test of electrolyte and nonelectrolyte solutions on these cultural products. In the aspect of chemistry knowledge, students explained the effect of macroscopic phenomena on the conductivity of the solution, investigate the dynamics of the ionization reaction process of salt solution, and explained the chemical processes that occur in the electrolyte test of Palembang culture products. The chemical aspect in the context of explaining the phenomenon of electrical conductivity in electrolyte and nonelectrolyte solutions found in Palembang cultural products through scientific evidence and understanding the relevance and usefulness of electrolyte solutions in cultural products. In the aspect of high-level learning skills, students were able to ask questions about phenomena in simple electrolyte tests and try to find information in discussions about electrolyte and nonelectrolyte solutions. In the affective aspect, students showed interest in chemical issues associated with Palembang cultural products by analyzing and providing solutions to a problem. Based on the overall chemical literacy test of students, it shows that 14% of students achieved a very good level, 81% of students reached a good level, 5% of students reached a sufficient level, and none of the students achieved a bad and not very good level. Increased student literacy results cause learning to be contextual and meaningful even during online learning.

Keywords. Chemical literacy, chemistry learning, contextual and meaningful learning, electrolyte and non-electrolyte solutions, etnopedagogical approach