

SURVEY OF DIFFICULTIES IN CHEMISTRY SUBJECTS: PERCEPTIONS OF CHEMICAL STUDENTS AND TEACHERS OF HIGH SCHOOL IN GUNUNGKIDUL DISTRICT

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ABSTRACT

This study aims to explore the difficulties in chemistry subjects in terms of the perceptions of high school chemistry students and teachers in Gunungkidul Regency. This research was designed and carried out using a survey method. The samples used in this study were class XII high school students and high school chemistry teachers in Gunungkidul Regency. The sampling technique for students is done by convenient sampling, while for teachers it is done by saturated sampling. The data collected in this study is data on the perceptions of students and chemistry teachers in senior high schools in Gunungkidul Regency on chemistry subjects. Data were collected using a non-test technique in the form of a questionnaire. "Student Perception Questionnaire of Chemistry" (APSK) and "Teacher's Perception Questionnaire of Chemistry" (APGK) used to collect data in this study consisted of open questions and closed statements. Closed statements contain the same indicators as open questions. Open questions aim to explore the opinions of teachers and students about the causes of difficulties in chemistry subjects, while closed statements aim to reveal the perceptions of students and chemistry teachers in high school towards chemistry subjects. Statistical descriptive techniques and Kruskal Wallis test were used to analyze the data obtained from the closed statements of APSK and APGK. As for the data obtained from APSK and APGK open questions were analyzed using a qualitative descriptive technique with content analysis using a combination of interpretive and inductive coding. The results showed that the category of high school chemistry students' and teachers' perceptions of chemistry was in the sufficient category, meaning that high school chemistry students and teachers viewed chemistry as a fairly difficult subject. The majority of students' difficulties with chemistry are caused by scientific language, mathematical abilities, student abilities, and teacher competence in conducting chemistry lessons. As for students' difficulties in chemistry subjects based on the teacher's view, the majority are caused by abstract chemistry concepts, the need for good mathematical skills, scientific language, lack of chemistry learning facilities, low student motivation, and lack of pedagogic competence of chemistry teachers. In addition, there are differences in the perception of the difficulty of students and chemistry teachers on chemistry subjects, especially in the aspect of chemistry learning content and teacher competence. The output of this research is an article that has been presented at the ICRIEMS FMIPA UNY 2020 international seminar. The article is entitled In-Service High School Chemistry Teachers' View towards Chemistry: Is It Difficult Subject? which will be published in the SCOPUS indexed AIP Conference Proceedings.

Kata Kunci: learning difficulties in chemistry, perception, high school chemistry, exploration