

ANALYSIS OF PRESCHOOL SCIENCE AND NATURE ACTIVITIES DIARIES WITH TEXT MINING TECHNIQUES

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Abstract

Several courses about science activities are being made in relation to preschool education in faculty of education. In these courses, experiments are being designed by students according to the experiment design and application principles. The aim of this study is to determine the effects of keeping diaries which were written at the end of experiment day and to analyze these diaries using text mining. Diaries were kept by the second-grade students during the course of "Science and Nature activities in Preschools" who studies in the Undergraduate Program in department of early childhood education. In the study diaries kept by sixty students which contains the experience, feelings and criticism of the students about the experiment process were analyzed using text mining. The analysis revealed the most frequently used terms, associations between words, and the similarities among the diaries. The findings showed that the most frequently used words and terms are those which are about the content of the experiments. It was also found that the students sufficiently reflected the content in their diaries. Associations between words reflects the points which students focused on during the experiments. It was also found that similar diaries that produced from one origin can be detected using the similarity analyses.

Keywords: Text mining, diary writing, science activities, preschool education.