



İLKÖĞRETİM FEN BİLGİSİ ÖĞRETMEN ADAYLARININ KARBONDİOKSİT VE SU DÖNGÜSÜ KONUSUNDAKİ BİLGİLERİNİN ÇİZİM İLE SAPTANMASI

Yrd. Doç. Dr. Dilek Çelikler
Ondokuz Mayıs Üniversitesi
Eğitim Fakültesi, İlköğretim Bölümü
Samsun, Türkiye,
dilekc@omu.edu.tr

Nuray Topal
Ondokuz Mayıs Üniversitesi
Eğitim Bilimleri Enstitüsü
İlköğretim Bölümü
Samsun, Türkiye
nuraytopal@hotmail.com

Abstract

Live, needs basic substances such as water, carbon, oxygen, nitrogen and phosphorus to maintain their lives' and it is necessary that these important materials must renew as much as they used. There is a continuous Exchange of substance between water, air, soil and lives. This exchange ensures the continuation of vibrant life by allowing to re-use of these substances. In this study, we aimed that to determine the knowledge of pre-service elementary science teachers about the water and carbon dioxide cycle, holds an important place for the environment and vitality, and taking place in the content of Special Topics in Chemistry course, by drawing. The study samples consist of 75 pre-service teachers, taking the course Special Topics in Chemistry, is studying in 3th class of Science Teacher in Faculty of Education of Ondokuz Mayıs University. In the study, the pre-service teachers were asked to make drawings of carbon dioxide and water cycle, also written descriptions of them. In the study, while drawings and writings of pre-service teachers about the cycle of carbon dioxide and water were qualitatively evaluated and made descriptive analysis, and according to drawings knowledge levels of pre-service teachers was grouped on the basis of the levels used by Bartoszeck et al. (2008) and Uzunkavak (2009a, 2009b). At the end of study, when knowledge levels of pre-service teachers about the cycle of carbon dioxide and water was examined according to the levels, we determined that vast majority of pre-service teachers were in the level 3 and level 4 at their drawings, and had the lack of description of these drawings.

Key Words: Water cycle, carbon dioxide cycle, drawing, pre-service science teachers.