

## **ANALYSIS OF MATHEMATICS TEACHER CANDIDATES' CONCEPTUAL KNOWLEDGE RELATED TO SEQUENCES**

Assoc. Prof. Dr. Abdullah Çağrı BİBER  
Kastamonu University, Educational Faculty  
Kastamonu- TURKEY

Assoc. Prof. Dr. Abdulkadir TUNA  
Kastamonu University, Educational Faculty  
Kastamonu- TURKEY

### **Abstract**

The purpose of this study is to examine the conceptual knowledge of mathematics teacher candidates about the sequence concept. This research is a case study in which qualitative methods are adopted. The first phase of the study was conducted with a total of 45 teacher candidates taking the course of Analysis III. In this stage, the "Sequence Knowledge Test" consisting of four open-ended questions developed by the researchers was used as a data collection tool to examine the concepts of the teacher candidates about the sequence concept. In the second stage of the research, individual interviews were made with 8 teacher candidates selected from the sample in order to conduct an in-depth study on conceptual knowledge about the subject of the sequence. Content analysis was used to analyze the obtained data. As a result of the analysis of the data, important shortcomings were found in the concept knowledge of the teacher candidates.

**Keywords:** Mathematics education, conceptual knowledge, sequences.