

## **Factors Affecting In-Service Teachers' Application-Based Educational Technology and Material Development Skills: A Causal Analysis of a Turkish Case**

### **Abstract**

The purpose of this study is to investigate the factors affecting in-service teachers' application-based educational technology and material development skills intended to be taught in the newly adopted Educational Technologies and Material Development course in Turkey. A total of randomly selected 2600 elementary education, science, mathematics, social sciences and Turkish Language teachers working in urban elementary and middle schools in Turkey participated in the study. It was found that male and female teachers' application-based educational technology and material development skill levels are not significantly different. Science, elementary and social sciences teachers' skill levels are significantly higher than Turkish Language teachers' skill level. It was also found that teachers' application-based educational technology and material development skill level can be predicted by years of teaching experience, teachers' perception on the importance of the skills and teachers' perception on school infrastructure supporting the use of the skills in the classroom.

**Key words:** *educational technology, technology skills, teachers.*

### **Introduction**

Effectiveness of educational technology in schools and classrooms has been well investigated. Numerous research articles published in scientific journals have examined different aspects of educational technologies, one of which is the factors affecting and explaining teachers' educational technology competences.