

THE DEVELOPMENT OF A SCALE TO DETERMINE MIDDLE SCHOOL PRINCIPALS' OPINIONS ON THE TURKEY'S MATHEMATICS CURRICULUM

(Okul Müdürlerinin Türkiye'nin Matematik Programı Hakkındaki Görüşlerini Belirlemeye Yönelik Ölçek Geliştirme Çalışması)

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Abstract

Schools aim to provide pre-determined knowledge, skills and attitudes to their students through a planned and organized process. Successfully managing schools can heavily impact the quality and effectiveness of the educational system. Depending on the current social, political and technological developments, the roles and responsibilities of school principals are constantly changing. According to the 11th National Education Council, school principals are responsible for making decisions, planning, coordinating, communication, supervision and assessment in order to restructure their schools based on the current social changes and needs, manage students, teachers and budgets, and over-see buildings, materials and tools. In successful schools, school principals carefully plan and observe curriculum, constructively solve conflicts and issues, provide the maximum level of organization and coordination, maintain positive relationships, communicate effectively, and possess excellent supervision skills.

Social, economic, cultural, and political changes occurring in a rapidly developing world have affected educational systems as well. Changes in these educational systems have led educators to implement more constructivist approaches in order to train individuals who will actively participate, question, think, and generate their own information and solutions. Parallel to the developments occurring in the world, the Ministry of National Education in Turkey revised the programs in 2005, along with it the mathematics program. This mathematics program emphasized adopting a student centred approach rather than a teacher centred approach and has been in practice beginning of the academic year 2005-2006. Since the program has been implemented in schools, several studies investigated the opinions of mathematics teachers, students and their parents regarding this mathematics program. School principals are also one of the stakeholders of the educational system; however, a study investigating principals' opinions has not been found. In Turkey, where schools vary greatly, the infrastructures of schools is a concern in the implementation of the new mathematics program. Also due to their new roles in the classroom, teachers needed in-service training. The infrastructure of schools and creating an atmosphere conductive to teachers' professional growth are overseen by school principals. Thus they play an important role in the successful implementation of the new mathematics curriculum. As a result, this study aims to develop a scale to determine the opinions of middle school principals with respect to the mathematics curriculum.

In order to prepare the scale the first step was to carry out a review of the related literature. A draft of the scale was then prepared and shared with six experts; 3 of whom were faculty in mathematics education, 2 of

whom were faculty in measurement and evaluation, and one of whom was a faculty in educational administration and policy. Based on these experts' opinions and recommendations a scale with 14 items was finalized. This scale was then piloted in many cities across Turkey and was administered to middle school principals working throughout Istanbul. Originally, a total of 215 principals completed the scale. Researchers then reviewed the completed scales and eliminated those that were incomplete or had the same option selected for all its items. Following this vetting the data from the remaining 201 scales was reviewed and analyzed. Results of the factor analyses indicated that the scale, composed of 13 items had five factors; 1) Constructivist education, 2) Cooperation, 3) The quality of education, 4) The applicability of the program and 5) Regional/school differences. The Cronbach Alpha for the scale is 0.774; thus the scale is considered to be both valid and reliable.

Keywords: Middle school mathematics program, middle school principle, scale development, mathematics education, mathematics reform, scale for school principles' opinions