

Chapter 2

AN ASSESSMENT OF THE EFFECTIVENESS OF THE SCIENCE EDUCATION PROGRAM APPLIED TO FIVE-YEAR-OLD CHILDREN ON THEIR ACQUISITION OF PERSPECTIVE-TAKING SKILLS WITH CHILDREN'S SCIENTIFIC INQUIRY PROCESSES AND LIFE SCIENCE CONCEPTS¹

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1. INTRODUCTION

Science and science activities have an increasing significance in preschool education program. If love of science together with scientific thinking and expression skills are developed among preschool children, they will get the chance to learn science concepts at an early age and to learn methods and attitudes required for science activities, this situation will create a solid basis for science, mathematics and literacy (Ölçer, 2017). Generally, science is the process of gathering information, assessment, thinking about actions and events, making observations and reflecting. It is a dynamic and person-specific activity that attempts to identify and explain the physical and biological world. Science is not only a sum of facts about the world but also a way of inquiry and thinking based on experimental criterias, logical thinking and continuous questioning. Science includes living-lifeless nature, concepts, theories, and principles (Brewer, 2001; Lind, 2005). Pre-school science activities are activities that direct children towards paying attention, asking questions, making inquiries, observing, examining and exploring (MNE Early Childhood Educational Program, 2013, p.48). Early childhood level science education aims to let children understand concepts and bioscience, therefore understand relationships around them and the life cycle in nature, develop an understanding of science together with simple chemical processes and physical

¹ The study was derived from Sevinç ÖLÇER's PhD dissertation titled " Examination of effect of science training program on five-year-old children's skills in science learning and perspective-taking".

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should ensure that teachers' performances of implementing activities such as workshop, seminar can be improved, and positive attitude towards science and implementing science activities accordingly in preschool education institutions.

In present study, preschool children's science learning was detected through Science Learning Assessment-SLA Test. In future studies, children's science learning can be assessed with the Science Learning Assessment test in a way to include portfolio and qualitative analyses can be performed. Science Learning Assessment test can also be used to find and compare students with high and low science abilities during the preschool period. From this perspective, this test may guide teachers in their activity adaptation studies for special talented children. Experimental studies towards comparing and improving preschool children's perspectives and that of primary school can be executed.

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