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## The Impact of Designer Teacher Professional Development Program on Teachers' Differentiation and Guiding Creative Thinking Skills

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### Abstract

The purpose of this study is to examine the impact of a professional development program on teachers' differentiation and guiding creative thinking skills. Desimone's (2009) path model was used as a theoretical approach. In this framework, a professional development program was designed for 150 teachers with varying ages, experiences, subjects, and grade levels. The program was based on helping teachers gain knowledge and skills within the scope of a professional development program (Path 1), implementing these knowledge and skills in an educational setting (Path 2), and observing the reflections of the implementation on student outcomes (Path 3). The program included different modules such as instructional design, differentiation, thinking skills, and educational game design. After a face-to-face camp that lasted three days, the teachers were supported by the experts through online activities for three months and the program was completed with a conference. Within the scope of the current study, the differentiation module focused on teachers' skills of adjusting the program elements according to students' readiness, learning profile and interest. Thus, the experts informed teachers about differentiation principles as well as differentiation techniques such as tiered instruction, learning agendas, learning stations and learning centers. In the thinking skills module teachers' skills of fostering thinking in the classroom were focused on. Teachers were taught 14 thinking skills from identification to creative thinking, and they were supported to integrate all these skills into their learning plans. The main aim of these two modules were to provide the teachers to set up open, free learning environments which are flexible in terms of time, teaching strategies and teaching activities and encourage students' thinking skills. The study administered a quasi-experimental research design. In this vein we used 'Self-Efficacy Scale of Differentiated Instruction' and 'Guiding Creative



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Thinking Skills Scale' as data collection tools to apply pre- and post-tests before and after the program. We used a comparative quantitative analysis to explore the effect of the program on the teachers' skills in using differentiation and thinking strategies to design unit plans. Pre-posttest comparisons indicated that the teachers improved their skills in these two domains. Additional analysis also demonstrated that the extent of their engagement and the support provided were the predictors of their use of these strategies in their unit plans. We recommend adding engaging professional learning activities and expert support as facilitation to boost the effect of professional development.

**Keywords:** Designer teacher, professional development, effective instruction, differentiation, creative thinking, gamification, enrichment.