The Effect of Using Differentiated Instruction Approach in Teaching Mathematics on the Development of Divergent Thinking Skills and Social Skills for Primary School Students

Abstract:

The current study aimed at exploring the effect of using differentiated instruction approach in teaching mathematics on the development of divergent thinking skills and social skills for primary school students. The researcher prepared learning styles questionnaire and teacher booklet for teaching the unit of " Groups " for fifth grade primary students , first year, according to differentiated instruction approach. The researcher also prepared divergent thinking skills test and social skills questionnaire . The study sample included 96 primary students from Fayoum governorate . It consists of two classes , includes 48 pupils as an experimental group , the other included 48 pupils represent the control group. The researcher administered the learning styles questionnaire to define the pattern of learning styles of the two groups (auditory or visual or authentic) . Also, the researcher administered the study tools to gain pre-data, then taught the units for the experimental group according to traditional methods . Finally, the researcher administered the tools to gain post data.

The study results reveald that the experimental group performed better than the control one in the post administration of divergent thinking skills test and social skills questionnaire in every skill, and in the test as a whole . In addition , teaching according to differentiated instruction approach made the students of a spectific learning style pattern of the experimental group perform better in divergent thinking skills and social skills more than the control group . Also , there is no significant difference between the mean ranks of the scores of the experimental students with the learning style pattern (auditory or visual or authentic) in the post administration of the test of the divergent thinking skills test and social skills questionnaire. This was because the activities and the teaching strategies of the program that helped to develop divergent thinking and social skills for the 3 groups equally. The results revealed also that there is a positive correlation, significat at 0.01, between the experimental group scores in the post administratin of both divergent thinking skills test and social skills questionnaire. The study recommended training teachers to use differentiated instruction approach and using some of teaching styles that help the learner to use divergent thinking and social skills.

Key Words: Differentiated Instruction Approach, Divergent Thinking, Social Skills