

# **The Effect Of Using Teaching Program Depends On Incorporating (Treagust via Daniel Model ) On The Achievement of The 10<sup>th</sup> Graders In Science And The Development Of Their Metacognition Thinking Skills**

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## **Abstract**

This study aimed at Investigating the effect of using teaching program depends on incorporating (Treagust via Daniel Model) on the achievement of 10<sup>th</sup> graders in science and the development of their metacognition thinking skills, The study was applied during the second semester of the academic year 2018\2019, on purposeful sample consisted of (121) students ( male & female ) selected from the population of the study in the Directorate of South Hebron (3577) 10<sup>th</sup> graders student, the sample was divided randomly into four groups in two schools, Where each school has two groups (experimental & control ). the researcher used the experimental method and the semi- experimental design which is suitable for the study purposes .

The researcher prepared an achievement test and a metacognition thinking skills scale after establishing its validity and reliability that was (0.82) for achievement test and(0.91) for metacognition thinking skills scale, then applied them to both experimental and control groups in both schools before and after applying the experiment, For statistical analysis: means, standard deviations and (2-way ANCOVA) tests were used.

The finding of the study showed: there were elevation on the achievement of 10<sup>th</sup> graders in science due to teaching with a program depends on incorporating (Treagust via Daniel Model), with no effect to gender and interaction between gender and method.

The results also showed that the program is effective on the development of 10<sup>th</sup> graders metacognition thinking skills, with an effect due to the gender of the student and due to the interaction between gender and method in favor to females of the experimental group .

According to the previous results, the researcher recommended the use of a program depending on incorporating (Treagust via Daniel Model) in teaching science, and holding more studies about these two models using other variables.