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**EXAMINING THE EFFECT OF DIRECTED
ACTIVITY RELATED TO TEXTS (DARTs) AND GENDER
ON STUDENT ACHIEVEMENT IN QUALITATIVE
ANALYSIS IN CHEMISTRY**

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ABSTRACT

Purpose – The present study examined the effect of Directed Activity Related to Texts (DARTs) and gender on student achievement in qualitative analysis in chemistry. It focused on the qualitative analysis component of the Chemistry course, which for students has been perceived as being the most difficult aspect of their mastery of the subject.

Methodology – The study involved 120 secondary four science stream students from two local fully residential schools. In a quasi-experiment, participants studied the topic of qualitative analysis of salt, using one of the following three instructional methods: Experiment, DARTs, and Combination of Experiment and DARTs. The participants in the three groups were then tested on their knowledge about salt.

Findings – Results of a two-way independent ANOVA performed on the experiment data revealed a significant main effect corresponding to the type of