EVALUATING INSTRUCTIONAL QUALITY AND ITS EFFECT ON SEVENTH-GRADE STUDENTS’ ACHIEVEMENT AND MOTIVATION IN SCIENCE LEARNING

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ABSTRACT_ The present study aims to evaluate the teachers’ quality of instruction and its effect on students’ achievement and motivation in science learning. The study sample includes 140 students (70 males and 70 females) and four science teachers (2 males and 2 females). The sample is selected from two preparatory schools: Oroba and Gomhoria, in Aswan city. Three instruments have been adapted and developed. These instruments are the Clausen scale for teacher’s quality of instruction, an achievement test, and a motivation questionnaire. The descriptive approach is used to prepare and analyze the data, to answer the study questions, and to interpret the results. The findings are as follow: 1) a low level of teachers’ quality of instruction as a whole and in each sub-scale of the Clausen scale. In addition, there are no statistically significant differences related to the teacher’s gender between the average of students’ scores on teachers’ quality of instruction, achievement and motivation in science learning, 2) there are significant differences at the level of \( p < 0.0001 \) between the average of girls’ and boys’ scores regarding the quality of instruction and motivation in science learning. Girls’ performed significantly better. However, there is no statistically significant difference between girls’ and boys’ scores regarding the achievement, 3) the results confirmed that there are positive correlations with a small effect size (0.30 > r > 0.10) among the variables of teachers’ quality of instruction and the achievement and motivation in science learning. The study recommends: 1) raising science teachers awareness of the importance of achieving quality instruction, 2) organizing workshops and training programs for teachers to know and to understand the dimensions and the variables of quality of teaching.

KEYWORDS: Clausen Scale, Science Teaching Quality, Science Achievement, Motivation in Science Learning, Seventh-grade Students.