Abstract

The Role of Science Teachers in Developing Creative Thinking According to Eighth Grade Students’ Perception

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This study investigated the role of science teachers in developing creative thinking according the perception of 8th grade students by addressing the following question: What is The Role of Science Teachers in Developing Creative Thinking According to Eighth Grade Students’ Perception?

Furthermore the following sub-questions were derived from the main question:
1- Do eighth grade students perceive the role of teachers differently in developing creative thinking according to gender?
2- Do eighth grade students perceive the role of teachers differently in developing creative thinking according to scientific achievement level?
3- Do eighth grade students perceive the role of teachers differently in developing creative thinking according to the
interaction between gender and scientific achievement level?

4. Do eighth grade students perceive the role of teachers differently in developing creative thinking according to teacher qualification?

5. Is there discrepancy between the scores of students on the creative thinking ability test and their perception of the role of teacher in developing students creative thinking?

The sample consisted of 441 (F = 252; M = 189) students and which comprised 10.04% of the original study population. A cluster simple random sampling procedure was used to select the sample. Two instruments were used: The first was developing a 45-item creative thinking scale according to the perception of 8th grade students. The second instrument was a creative thinking ability test consisting of 18 questions measuring creative thinking components. Validity was measured by having six professionals knowledgeable in the field judge the instrument's appropriateness. Reliability of the role of teachers in developing creative thinking instrument and the creative thinking ability test were measured by test-retest (r = 0.84; 0.85) and internal consistency (Chronbach Alpha = 0.85; 0.89) methods respectively.

The results revealed that the students' perception of the role of science teachers in developing creative thinking on the instrument (M = 3.64) appears to fall within the moderate range given that the maximum score that could be achieved is 5.0.

To test the first three hypotheses Two-Way Analyses of Variance were conducted on the data, and which showed the following results:
1- Gender significantly impacted on students' perception in-favor of females.

2- Scientific achievement significantly impacted on students' perception in favor of high achievers.

3- No significant results were found due to the interaction between gender and scientific achievement.

To test the 4th hypothesis, a One-Way Analysis of Variance was conducted on the data which revealed that there were significant differences in-favor of middle community college certificate group.

Chi-Square Analysis revealed that there were significant results to indicate that a discrepancy exists between science teacher's role in developing creative thinking scale scores and students' scores on the creative thinking ability test.