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Ortaokul 5. Sınıf Öğrencilerinin Fen Bilimleri Dersinde Öğrendikleri Bilgileri Günlük Yaşamlarıyla İlişkilendirebilmelerine Yönelik Düşünceleri ile Fen Bilimleri Dersindeki Başarıları Arasındaki İlişki

Relationship between Their Opinions about Their Daily Life Association with Information that Middle School 5th Grade Students have Learned in Science Course and Their Achievements in Science Course

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Extended Summary

Purpose

In this research, we aimed to determine the relationship between their opinions about their daily life association with information that students have learned in a science course and their achievements in that science course. In addition, the effect of students' genders on their success in science lessons and their ideas related to correlating their knowledge with their daily lives was also researched.

Method

78 students studying in the fifth grade at the Ministry of Education Middle School in Oltu in the province of Erzurum participated in the research. In the study, we used the "relational scan model", which is one of the accepted scan models. For the purpose of determining opinions about the students' daily life association with the science course, we applied the scale of science course association with daily life developed by Kamaraj. In addition, an achievement test consisting of 25 questions to measure their achievements in science lessons was applied to the students. Students' answers to the achievement test were evaluated using the categories and scoring criteria developed by Abraham, Williamson & Westbrook (1994). Zero points were given to answers 'not understood' in the categories of students' answers, one point to 'certain misconception', two points to 'partially understand with a certain misconception', three points to 'partly understand' and four points to the answers in the category 'fully understand'. In this way, it was calculated that the students' lowest score was zero and the highest score was 100 in the test. The points that the students received from the scale of science course association

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with daily life and from the achievement test were calculated and analyzed with SPSS.

Findings

Significant differences in favor of women between the students' sexes and their opinions about their daily life association with the science course were determined [t(76) = 2.862, p < .05]. There was no significant difference between the students' information in the science course and their sexes [t(76) = 0.118, p > .05].

A statistically significant [p < .05] intermediate level [r = 0.558] positive relationship was found between the students' achievements in the science course and opinions about their daily life association with information.

It was determined that a majority of the students responded in the category 'a certain misconception' about the task of the large intestine, friction, heat, and temperature.

It was determined that a majority of the students responded in the category of 'partially understand' about the task of the stomach, flexible bodies, change of state, sublimation, environmental issues, independent variable, mining and fossils.

It was determined that a majority of the students responded in the category 'fully understand' about dynamometers, how to spread light, transparent material, and classification of living.

Conclusion

It was established that a statistically significant positive relationship was found between the students' achievements in the science course and opinions about their daily life association with information. This result indicated that the students who can associate information with their daily lives will be more successful in the science course. The ability of students to correlate the information they learn in science lessons with their daily lives will increase the interest of students in science, ease their comprehension of the subjects and accordingly increase their science success.

As a result of the research, it is suggested that the positive relationship between correlating science lessons with daily life and science success should be taken into consideration so as to give more place to activities that allow students to correlate science lessons with their daily lives. Environments where they can establish such relationships should also be provided to students.