

FACTORS AFFECTING THE MOTIVATION LEVELS OF SECONDARY SCHOOL STUDENTS FOR SCIENCE LEARNING

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1. INTRUCTION

A vision of science and technology course is regardless of their individual differences all students are trained as science and technology literate. Science and technology literacy will be explained with a general definition; It is a combination of science-related skills, attitudes, values, understandings and knowledge required for individuals to develop research-inquiry, critical thinking, problem-solving and decision-making skills, life time learning and maintain a sense of curiosity about their environment and the world (TTKB, 2006). Teachers should not only motivate their students according to their students' interests, but also help science literacy (Talib, Luan, Azhar & Abdullah, 2009). Motivation is known as an important factor that affects students' creativity, learning styles and academic success (Kuyper, Van der Werf & Lubbers, 2000). Motivation is a driving force for students to succeed, work hard and learn (Martin, 2001). Motivation is a force to satisfy a need, and this force refers to the internal factors that activate the individual and external factors that encourage the individuals to behave (Walterman, 2005).

It is known that successful teachers motivate their students at certain levels. However, arousal that causes anxiety, can cause decrease in performance (Öncü,

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motivation to learn science (Demir, Kılınc, & Doğan, 2012). In the case of monthly income, it is stated that there is a significant difference in motivation for science learning, motivation for collaborative work and motivation for participation (Demir, Kılınc, & Doğan, 2012).

Lavigne, Vallerand & Miquelon (2007) stated that the support of science teachers positively affects students' self-management and self-efficacy perceptions; It stipulates that there is a direct relationship between the perception of competence and intention to pursue science education, and that the high level of competence is to maintain the high level of intentions. Talib, Luan, Azhar, & Abdullah (2009) stated that the choice of strategies suitable for science learning, having certain skills, and the interaction between teachers and peers positively affect the motivation to learn, as a result of the research in which students define the underlying conditions of their motivation for learning science.

The students participating in the research stated that they wanted more detailed information while explaining the subject. In addition, the students stated that they were undecided in lending their books and lecture notes about science to their classmates and in group studies, and in items that reveal their status of caring about their friends' opinions. The students stated that they wanted to get the highest grade in science lesson exams, and they had close positive results in their class discussions to reveal the best ideas and choose their friends to work while doing group activities. Success, recognition and praise from their teacher are among the motivating factors. Yajima, Sato & Arai (1996) revealed that there is a causal relationship between academic achievement and motivation for learning science as a result of the study in which they examined the relationship between motivation for learning science and factors affecting academic success.

Motivation self-efficacy, focus on task, effort and control (Garcia, 1995); It was determined as a result of the researches that it was related with variables such as gender age, own library, parental education level, and socio-economic level of the family (Katrancı, 2015; Smith, 1996; Yıldız & Kaman, 2016).

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