

## **The Levels Of Vocational High School Students' Perception Of Mathematical Terms**

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### **Abstract**

In this study, we dwell on the determination of the levels of readiness for the classes of Mathematics I and Mathematics II perception type of mathematical terms acquired in the process of primary and secondary education of the students who have newly attended to Vocational High School. In this frame, the model of the study made up of 112 students attending to the first grade of Vocational High School. To collect data, we applied a test with 7 open-ended questions with the purpose of determining their readiness levels. In analysis of the data, we made use of frequency and percentage tables and we gave place to some of their answers as they are. According to the results of the research, we determined that most of the students are lack of mathematical background. As a result of this, we have concluded that their readiness levels of Mathematics I and Mathematics II that they take in higher education is low. Besides we have determined that they have some misconception in literature and learning difficulties. According to the results obtained, the curriculum of mathematics in Vocational High Schools should be revised as to the mathematics levels of the students.

**Keywords:** Vocational High School, Readiness, Mathematics Lesson, Mathematics Education

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### Extended Summary

#### **Purpose**

In recent years, the increasing number of universities in our country, and especially the admission to Vocational High Schools without examination have provided free entrance to universities for the students and caused the students who lack of basic information about mathematics. In addition, with the introduction of the students at various levels to universities, the importance of determination of readiness levels has been increased. The aim of this study was to determine the students' perceptions of mathematical concepts acquired in the process of primary and secondary education and the level of readiness at mathematics-I and Mathematics II courses.

#### **Method**

Case study method, one of the qualitative research methods, was used in this study. One of the eight Vocational High Schools Vocational High School was selected with purposeful sampling taking into account and first-year students are selected using simple random sampling method, 112 students formed the research sample. As a means of collecting data an attempt to determine the level of readiness of students a test composed of seven open-ended questions was used. Frequency was made use for analysis of the data. In tables created for each question, frequencies, the classification of the answers and main bases of the answers were referred.

#### **Findings**

Considering the data obtained from findings, most of the students were seen to have various errors and difficulties in definitions of basic mathematical concepts as well as the applications of definitions. The percentages of correct answers given to questions based on of transactional information were found low, in addition, the students seem to have learning difficulties and misconceptions in the literature.

#### **Conclusion**

As a result, in the analysis of the data obtained from the findings , the students can be said to have difficulties in both definitions and operational level of sub-set, absolute value, number of sets, fundamental numbers, exponential numbers, and integers.

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