

**Fen Lisesi Kimya Öğretmenlerinden Bir Yansıtma: Güncellenen
Kimya Öğretim Programı ile İlgili Görüşler***

**A Reflection from Chemistry Teachers of Science High Schools: Views
About the Revised Chemistry Curriculum**

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Extended Summary

Purpose

The chemistry curricula have been modified due to the changes in the field of chemistry, approach in education, and the nation's future goals. For a more effective chemistry education, it is important to consider the experiences and the views of the practitioner chemistry teachers. The purpose of this study was to investigate the views of chemistry teachers who were working at science high schools, about the chemistry curriculum which was revised in 2013, and started to be implemented since 2013-2014 gradually.

Method

This study was designed as a survey study to elicit the views of chemistry teachers working at science high schools, about the revised chemistry curriculum by giving an open-ended questionnaire.

The sample was selected through purposeful sampling, at which, first the science high schools located in seven geographical regions of Turkey, were determined, and then, through the convenience sampling representative schools were selected. The teachers were contacted personally by the researchers and the aim of the study was explained. Forty-two chemistry teachers working at science high schools participated voluntarily in the study. While eight teachers had master's degree two teachers had PhD. The majority of the teachers ($n=26$) had more than 20

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years of experience and 15 teachers had experience between 10-20 years, and only one teacher had experience of 0-10 years.

The views of the teachers were collected by an open-ended questionnaire, *Chemistry Curriculum Evaluation Questionnaire (CCEQ)*, where they compare the current curriculum with the previous one. The CCEQ contained 5 main themes; namely, *the structure of the curriculum, acceptance of curriculum, views about the content of the curriculum, feelings about the curriculum, and implementation of the curriculum*. The data were analyzed by the content analysis; first all the data were open-coded, and then based on the themes existed in CCEQ, and categories and subcategories were determined by adopting a more deductive approach (Patton, 2002). During the coding, inter-rater reliability was established by having the two researchers code and reach full agreement.

Results

The responses of teachers were coded and categorized based on the existing themes in CCEQ.

I. The structure of the curriculum: The results of the analysis of data showed that the majority of the chemistry teachers reported that both teachers and the students were also active in the current curriculum. About the same percentage of teachers showed positive and negative views about the learning activities and the measurement and evaluation parts in the curriculum. The majority of the teachers (n=31) reported that in this curriculum, they were more in an oral communication with their students therefore that affected their style of teaching. As an extension, again the majority of the teachers (n=31) said positive views about the textbooks published for the current curriculum and 26 teachers conveyed positive thoughts about the supplementary materials aligned with the curriculum.

II. Acceptance of curriculum: All the teachers, with no exception, said they owned the curriculum booklet and they often used it when they prepare their lesson plans.

III. Views about the content of the curriculum: The majority of the teachers mentioned that the curriculum was clear and easy to understand. The teachers argued that some topics were given more intense in some years, especially in grade 9, 11 and 12. They mostly agreed that the topics in the 10th grade were not difficult, but they leave room for memorization. In addition, the majority of the teachers (n=26) reported that the topics in the curriculum were related to one another and with daily-life. All in all, they agreed (n=36) that the topics in the curriculum are not difficult for the students studying at science high schools.

IV. Feelings about the curriculum: The majority of the teachers (n=26) mentioned about positive feeling while implementing the current curriculum. They listed the causes of their feelings as teaching to students, deepening content

knowledge, curriculum itself, increasing professional experience and professional satisfaction .

V. Implementation of the curriculum: The teachers also reported several factors, such as physical conditions (n=11) students (n=10) and planning (n=5) as some of the factors affecting their implementation of the curriculum

Discussion

This study conveyed views chemistry teachers who were working at science high schools about the current chemistry curriculum. The majority of the chemistry teachers reported that both teachers and the students were also active in the current curriculum, and about the same percentage of teachers showed positive and negative views about the learning activities and the measurement and evaluation parts in the curriculum. In addition, the majority of the teachers mentioned that the curriculum was clear and easy to understand, yet some topics were given more intense; and students, physical conditions and planning were the factors affecting the implementation of the curriculum.

Conclusion

In conclusion, while the teachers were bringing some suggestions regarding the system, the content and structure of the curriculum, textbooks and other materials; they emphasized the differentiation of the curricula according to the school types.