

- Developing The Chemistry Teacher Preparation Program at The Faculties of Education in The Light of Chemo-Informatics.

## **ABSTRACT**

The present study aimed at developing the chemistry teacher preparation program at the faculties of education in the light of chemo-informatics. In order to achieve this objective, A questionnaire on the fields of chemo-informatics and their applications, which should be included in the chemistry teacher preparation program, has been developed and administered on a group of chemistry staff members at the Faculty of Science as well as some socialized in science instruction at the faculty of Education (FOE), Benha University. A list of the standards which should be included in the chemistry courses at the FOE and an analysis tool for the chemistry courses were developed. As a result, a suggested vision and perspective for developing the chemistry teacher preparation in the light of chemo-informatics was prepared and the effectiveness of a suggested unit was measured. The instructor handbook and the student book were also prepared. The unit was experimented on a sample of 117 male and female students in the third year, chemistry section, faculty of Education, Benha. A test in the cognitive domain was prepared and administered after the implementation of the suggested unit. The study findings revealed that there was a statistically significance difference at 0.01 between the scores means of the pre-application and those of the post-application on the core ideas understanding test, in favour of the latter. Consequently, the suggested unit was effective in developing the cognitive domain of chemo-informatics.

- **Keywords:** Unit in chemo--informatics – chemistry teacher preparation program – chemistry curriculum – university level.

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