

ABSTRACT

This research investigates (an analytical study that aims to evaluate the chemical concepts of the chemistry subject syllabi in the secondary stage in the Sudan.

The study aims at:

1. Introducing the main chemical concepts, which contain the chemistry syllabi in the secondary stage in Sudan.
2. Realizing the chemical concepts and the topics, which are found in the chemistry syllabi in the secondary stage.
3. Introducing the laboratorial experiments in the chemistry syllabi in the secondary stage and the range of its relationships with the student's further understanding of these chemical concepts.
4. Comparing the chemical concepts in the syllabi contents with the chemical concepts that were suggested by the educational regional and international organizations.

The questions of the study are:

1. What are the kinds of scientific chemical knowledge, which contain in the new chemistry syllabi in the secondary stage in the Sudan?
2. What is the experimental laboratorial depth in the chemistry syllabi in the secondary stage in the Sudan?
3. What are the kinds and levels of the main chemical concepts in the chemistry syllabi in the secondary stage in the Sudan in comparison with what suits this educational level?
4. Do the contents of the syllabus about chemical concepts achieve the objectives of teaching chemistry in the secondary stage in the Sudan?
5. Do the chemical concepts contained in the chemistry syllabi - in the secondary stage in the Sudan - suit the modern development and approaches in teaching science (chemistry)?

The researcher has used the descriptive analytical method and the questionnaire technique, plus adding two tools for analyzing the contents.

The study sample comprises 150 male and female teachers in the secondary stage.

Also, the research sample contains the chemistry syllabi at the secondary stage in the Sudan.

The research findings have been analyzed and discussed, using the frequency, means, the simplified percentages, the co-relation, co-efficient and the agreement standardizing deviations.

The study has come to the following main results:

1. The syllabi contents stress, basically, on the chemical facts.
2. The experimental laboratorial depth in the syllabus is poor and it isn't sufficient to provide the learner with the laboratorial and mental skills. In addition, it does not help to obtain the prescribed skill goals.
3. The contents of the syllabi do not include all the main chemical concepts required for the chemistry subject in this educational level.
4. The content of the chemistry syllabi achieve the prescribed educational objectives.
5. The chemical concepts and the issues contained in the syllabi contents do not suit the modern development and modern approaches in teaching science (chemistry).

The study has come out with recommendations, the most important ones are:

1. Ensuring the chemical concepts and reducing the unnecessary facts in the syllabi.
2. Adding some chemical articles, which were not included in the contents of the present chemistry syllabi.
3. Ensuring the experimental laboratorial dimension and increasing number of suitable chemical experiments in the syllabi contents.

4. Ensuring the development of the practical skill aspects and problem solving methods.
5. Preparing a list contains the main chemical concepts and the subjects it ought to fulfill and could be benefited from the list that the study has suggested.

The following are the main suggestions that the researcher has raised:

1. Making a study about the methods of teaching chemistry.
2. Making a study about the evaluation methods implied in the contents of the present chemistry syllabi.
3. Making a study about the educational aids that used in the present contents of the chemistry syllabi.
4. Making a study about the scope of including the learning process and chemical skills in the present chemical syllabi.