

INTRODUCTION :-

The Present age is characterized by a great progress in scientific method as well as modern technology in all fields especially science

Daily life has been affected by this progress and this necessitates the spread of science and simplifying it for learners in order to be able to face individual and social problem.

In this sense, learners in their various educational stages have to be provided by knowledge, skills and attitudes necessary for preparing them as citizen living in the age of Science .

This is so significant particularly for students of final educational stages. Whose chances of continuing education become less.

Hence, Students should be aware of the role of Science in developing them as persons as well as their society . Students also should recognize their role in maintaining the environmental resources and keeping them valid.

Students , again, should be aware of infectious diseases as well as faulty behaviors; hence, the importance of simplifying science and spreading it among individuals for realizing what is called scientific literacy which is now a main objective of the teaching of science.

THE PROBLEMS OF THE STUDY :-

The problem of the present study can be stated in the following questions:

- 1- What are the most important scientific topics through which some elements of scientific literacy can be developed in pupils of vocational prep schools?
- 2- To What extent does the content of the science coursebooks of the vocational prep school include these topics?
- 3- What is the effectiveness of a science unit intended to develop some elements of scientific literacy in pupils of second year vocational prep school?

PROCEDURE OF THE STUDY :-

To fulfil the present study , the researcher followed these steps:

1- Reviewing the literature related to:

- a) the concept of scientific literacy ,
- b) the elements of scientific literacy,
- c) the role of the science coursebooks in developing scientific literacy.
- d) some projects that concerned itself with developing scientific literacy.
- e) vocational prep pupils' needs and characteristics .

- 2- Preparing a list of the most important scientific topics that can develop some elements of scientific literacy in vocational prep pupils.
- 3- Analyzing the content of the science coursebooks of the three grades of vocational prep so as to indicate the extent to which the topics are available.
- 4- Preparing a proposal for incorporating these topics in the content of the science coursebook of second year vocational prep.
- 5- Preparing a modified unit that includes some of the pre-determined scientific topics and teaching it to a sample of second year vocational prep pupils using the researcher- provided teacher guide.
- 6- Preparing the two part scientific literacy measure (cognition & attitudes).
- 7- Pre- administration of the scientific literacy measure to the sample (control and experimental) then teaching the unit to the experimental group as well as teaching the same unit as it is in the coursebook without modification to the control group.
- 8- Post- administration of the scientific literacy measure to both groups.
- 9- Data analysis and interpretation of results.