

Abstract

It is pertinent to learn Science as Science. However, it is observed that the present Science curriculum do not provide an opportunity to learn the subject in the correct method. Instructions are given to do the teaching on many areas of the subject, science by means of poetry, stories and dialogues; where literature is enhanced while the nature of science is suppressed. It is also observed that there is no linkage between the Teachers' Guide and the Text Book when going through certain subject areas. In addition, when teaching certain subject areas, one cannot be satisfied with the sequence of subject sub topics and it is observed that the required talent standards do not flow in to the student.

Science is a core subject and it is included in the school science curriculum is the most powerful developing agent. This research was developed in order to address the following questions, namely; Whether Science education is catered to student via Junior and secondary science curriculum as per the nature of science subject?; What is science?; the knowledge factor of science (the content or output of science); the process of science (scientific method); attitudes and ethics in science and talent in science.

Knowledge in science is the outcome of utilizing searching methods. These outcomes are the glossaries of science, scientific facts, scientific formulae, the inter-relationship between various sectors of science, the importance of flora and fauna; and modern scientific innovation. As a scientific method of science; leading students to observe, making them classify, to measure, assisting in their communication, helping them build hypotheses and giving them opportunities to plan experiments and implement them. Scientific attitudes and ethics are inbuilt in a person following the scientific method. Attitudes and ethics can be considered as making the student to be inquisitive and thereby be studies oriented; building up a study environment which is logical and analytical, diverting students to scientific thought by useful questioning; showing them how to respect life; correcting their misconceptions, leading them to be honest in their knowledge factors; and leading them to be meticulous in the outcome/result. Also, the skills in science can be considered as giving them opportunities to plan and implement practical activities and collect data, giving them opportunities to put forth conclusion/proposals and interpretation them; exhibiting meticulous care and skills in practical work; cleanliness in practical work, drawings and

labeling them; encouraging students for self-reporting; encouraging them to note-taking; and leading them to build up motor skills.

The following objectives were based to study the aforementioned problems:

- Analysis of the appropriateness of the objectives of the Junior-Secondary science curriculum specific to the nature of the subject and the talents to be achieved.
- Analyse whether the contents of the science text book and its presentation tallies with the knowledge factor of science (content or the outcome)
- Analyse the appropriateness of the teaching methods prescribed in the Teacher's Guide to the knowledge factor (content or the outcome) of the subject of Science and the scientific method.
- Analyse whether the teaching and learning methodology utilized at school is appropriate to the nature of the subject science.

The narrative research approach was selected for the study. The data collecting methods used such as interviews, questionnaires, observation leaflets, literature surveys were analysed using comparison and the data obtained were analysed quantitatively as well as qualitatively by using quantitative techniques and also narrative and comparative methods. Percentages and graphs were used to give information arrived at, using the particular data available.

It was found out that there are objectives in curriculum which are not in line with the nature of the subject, science and also in talent searching it is outside the purview of the nature of science. In consideration of the contents of science text books and its presentation, it was also found that they include incorrect subject matter and also it is not compiled in par with the Teacher's Guide. When considering the Teacher's Guide, by the unnecessary literary aspects contained in it, it can be stated that the nature of the subject is suppressed. In observing the learning opportunities, it was seen that the attitudes and ethics in science and building up capabilities in science were in a minimum standard in all the schools included in the sample concerned in this research.

As per the information derived from the research, it can be concluded that in teaching science according to the Teachers' Guide, in Grades 6, 7 and 8 the talent building and attitudes and ethics in science will take place at a low level while the student will not grasp an understanding about the macro subject area. In an analysis of the overall result of this research, the presently practiced junior and secondary science curriculum is not specifically directed according to the nature of the subject "science".

It is proposed that the curriculum should be planned with a proper supervision and guidance in order to up-keep the nature of the subject.