EFFECTIVENESS OF ENRICHMENT PROGRAMME
FOR SCIENTIFICALLY TALENTED STUDENTS
AT SECONDARY LEVEL

ABSTRACT

Talent in any area is useful to mankind in one or the other way. However the contribution of the scientists to mankind is highly admirable. Despite the need for scientist, many of the gifted students are reluctant to take pure science as a course of study at higher education level. This may be a, but more obvious in India. The number of science graduates are decreasing rapidly. Those who don’t get in to any professional courses after higher secondary level only joins science streams and they suffer from some kind of complex. There is an urgent need to motivate the youngster to join the pure science courses. Mere advises will not help in this respect. Enrichment programme in science at secondary level will take care of the motivation of these students. The student has to be given first hand exciting experiences in science at early stage of schooling itself. Though secondary level is late, but still more feasible in a school context. However we cannot expect all the students to become good students of science. Those with above average and high aptitude in science can be expected to join pure courses in science with greater success. Hence there is a need to identify Scientifically Talented Students and nurturer them with enrichment programme. In order to do that the teachers should have a through knowledge about the characteristic of Scenically Talented Students, the procedure to identify them, the nature of enrichment programme to be developed.
In this study a multi-method of identification was adopted in order to identify Scientifically talented students of Grade IX of Mysore city. Scientifically ‘talented Students were selected based on 1) Peer Nomination 2) Teacher Nomination, 3) Intellectually superior 4) Above average scientific aptitude. Based on the interest of the students, two topics of Physical science were selected for enrichment programme. Enrichment programme was conducted based on these topics of physical science. The curriculum model of the enrichment programme was adapted from Multiple Menu Model of Renzulli (1988). In order to test the achievement in physical science before the enrichment programme, an achievement test was constructed. The performance of the Scientifically talented Students was poor Physical science of selected topic and poor in Understanding of concept, Understanding of Principles, solving the problem and attainment of graphical skill. Enrichment programme conducted by using different instructional strategies like Discussion, Peer tutoring, computer aided simulation, Independent study was effective in improving the understanding of concepts and Principles, solving the problems and attainment of graphical skill. This was measured by using a post-test. There was increasing in the passing percentage of students in each item of the test. The results were showing a learning gain in the enrichment programme which is in agreement with the results of studies conducted by Baska (1998).

As a whole the Enrichment programme is effective at total test level, Individual component level like Understanding of concepts, Understanding of Principles/Solving the Problems and Attainment of graphical skills.