

## **Secondary School Stage**

### **Introductory**

The secondary stage is the penultimate stage of the five stage, 12 years long matriculation school education. The students who come to this stage are pre-adolescents mostly 14 and 15 years of age after the completion of the middle school. They are reasonably well prepared with adequate academic skills to gain higher levels literacy, knowledge, skills and values, the core elements of school education. The characteristic developments gained during the middle school stage get strengthened. In addition the levels of thinking of abstract concepts and establishing social identity and importance of peer group would increase substantially.

### **Profile of the Learners**

The secondary stage learners are in the age group of around 14 and 15 and continue to undergo many physical growth and development related changes. They are in the adolescent stage which, according to Sigmund Freud marks with egos that leads to some level of superiority complex and are equally prone to inferiority complex as well. Mentally they are better matured than what they were at the middle school level and are potentially capable of higher levels of logical and critical thinking and problem solving. The attributes of thinking with abstract concepts, establishing social identity, and giving importance to the peer groups views increase considerably. They are ready at this stage to benefit from the social interactions with their own peers and others in the school and at home which is very important for effective learning and intellectual development. Such social interactions provide opportunities for developing cooperation with friends, share experiences, discuss discoveries and argue out their differences of views. Emotionally they are self-conscious and sentimental with strong likes and dislikes. They crave for recognition both at home and school which make them to take up leadership roles or for outdoing others in the team for recognition. Physically and physiologically the adolescents undergo many changes including their attraction for the opposite sex. Psychologically, the adolescents at this stage are generally tend to get disturbed with emotional conflicts and frustrations. Their aspirations and abilities are not reconciled and they need personal, educational and vocational guidance and counseling.

### **Goal and Objectives of the secondary stage**

At the secondary stage corresponding to the IX and X standards, the core objectives and goals remain by far the same as those of the primary level except they are taken to a higher level of achievement through intensive teaching and training.

### **Literacy-textual:**

Teaching language based textual literacy that commenced predominantly with aural and oral skills are taken forward to the higher competence levels of reading and writing. The overall objective of the language education viz., the preparing the students to use the

languages effectively in either mode (spoken/written) in their day to day life situations of all kinds, whether at home, work place or the society at large. This will be the case in all the languages they are expected to study during their school education.

### **Computational literacy:**

Further extension into the basic structure and principle of computing and the extensive use of computers of what they have learned at the previous stage.

### **Numeracy**

At this stage, the objectives of teaching mathematics are two fold. One is to further enhance the capacity of the students to employ mathematics in using effectively to their life situations. The other is a systematic study of mathematics as a discipline.

### **Knowledge elements**

At the secondary stage, developing scientific attitudes and skills through the teaching of selected disciplines of science and technology will constitute as the major objective. Exposure to the nature and the structure of science and the support it provides to the technological developments will be the focus. The other major aim is to provide subjected related skills through practical training in the laboratory and in the field.

To develop competency and skills through social sciences to understand and apply to the local, regional and national issues and events.

### **Skills and competencies**

To refine aesthetic sensibilities and social values through Work, Art and Health and Physical Education

### **Values**

Further strengthen, enhance and diversify the basic values chosen to focus in the earlier stages and the awareness levels of all the major religions the country.

### **Strategies**

As the Matriculation Schools have come as a distinct category because of its adoption of English as medium of instruction, the formal class room teaching will be in English for all the subjects except for the other languages. Having English as the medium of instruction, it is expected that all the teachers are expected to enhance the communication skill in that language instead of leaving the responsibility to the English language teachers.

Instructional time is fixed as not less than 180 days a year for face to face instruction with the duration of the day of 6 hours and the class period of 40 minutes. Adequate time allocations are indicated for extra curricular activities, library and other academic activities.

The scheme of studies for the secondary stage include, Mother Tongue/Regional languages, English, Scientific Tamil, Sciences (Physics, Chemistry, Biology) & Technology, Social Studies (History, Civics and Geography), Health Physical Education, Art Education and Work Experiences, Environmental Studies and Computer-Applications. These discipline based courses are chosen not only for the basic knowledge content but also as vehicles of imparting many skills and values.

In addition to the formal class room interactions, School Projects, Assignments, Field visits and laboratory training are indicated in the details of the syllabus for each course.

### **Time Allocation: period per week**

SECONDARY CLASSES										
Class	English	Tamil/ Regional Language	Maths	Science & Technology	Social Science	Scientific Tamil	Computer Education	Life Oriental Education	Physical & Health Education	Total
IXI & X Stds	6	7	7	7	6	2	2	1	2	40

### **Expected Outcome**

#### **Literacy-Textual**

Both in the medium of instruction and the other languages, the students at the end of this stage are expected to have full mastery over the applied forma of language and good acquaintance with the literature. They will have competence and maturity in oral and written expressions in response to what they read or listen to and will be able to appreciate and understand good literature whether they in the poetry or prose form. In short the students must be able to use the languages effectively in spoken and written modes in all their life situations

#### **Literacy-Computer based**

Students should have adequate knowledge about the basics of the computer architecture, its principle and function and be able to use them for both computations as well as for the home and office use.

#### **Mathematics**

Should have proficiency in reading and presenting information from the graphs and charts besides the regular mathematical calculating functions at all levels. Should be able solve problem using algebraic methods and apply the knowledge of simple trigonometry to solve problems of heights and distances etc. The students are expected to know the history of mathematics and the Indian contribution.

### **Knowledge elements**

They should be familiar with different dimensions of scientific and technological literacy. Would have gained general knowledge about the properties and composition of the worldly matters and some of the events related. They will be able appreciate and apply scientific methods while solving the problems and will have the scientific temper. Through the Social Sciences like history they must be able see through the organization of social institutions, their contribution and their civilizing influence.

### **Skills**

Should have gained fairly high level of Academic (literacy and numeracy) and computational skills for continued learning and to use them for solving practical problems like communication in the life. Besides, they should be able to demonstrate high levels of general skills that are transferable and some of the cognitive skills that sharpen their intellect.