



GOVERNMENT OF TAMIL NADU
School Education Department

Development of Curriculum for School Education – TNCF 2017
The Path Travelled...

Introduction

Constant Changes in social, economic, demographic spheres, urbanization, and technology spread have become the order of the day. Also, there have been incredible changes happening across the globe which impact the lives of people, especially the youngsters. Globalization has come to stay and the society needs to adapt to the emerging trends in all spheres of life. Since the implementation of National Curriculum Framework of 2005, many changes have also taken place in our society and in the world around us. The young learners need to cope with the challenges of the 21st century. This necessitated appropriate reconstruction in the curriculum of school education in the state.

In this context, the Government of Tamil Nadu has taken a decision to completely revamp the curriculum of school education. In order to implement this, the Government has issued orders constituting Committees/ Sub-committees exclusively for curriculum, syllabus and textbook development.

Government Orders

The following are some of the Government Orders issued by the Government of Tamil Nadu in this regard.

G.O.99 dated 22.05.2017

This order relates to revision of school education curriculum for standards 1 to 12. The State Council of Educational Research and Training has been assigned this responsibility. The Government order contains the timeline of revision, which is as follows,

Academic year	Standards
2018-19	1,6,9 &11
2019-20	2,7,10 & 12
2020-21	3,4,5 & 8

The following are the guidelines for the development of the syllabus and the textbooks:

- Incorporating ICT with science subjects for classes 6 to10
- Constitution of Experts committee for revamping vocational education
- Learning to be based on creativity and free from rote learning
- Joyful learning and stress-free student evaluation
- Emphasis on history, culture, art and literature of ancient Tamil
- Comprehensive textbooks
- Teacher handbooks and student workbooks
- Encouraging e-learning through Learning Management System
- Mobile Apps for teachers and learners

G.O. 100 dated 22.05.2017

This Government order relates to the introduction of Board Examination for Standard XI from the academic year 2017-18. The following are the key points:

- Equal weightage of marks for first and second year of Higher Secondary (600+600=1200)
- 10% of marks allotted for internal assessment for all subjects
- Duration of Board examination reduced from 3 to 2 $\frac{1}{2}$ hours
- Minimum pass percentage is 35
- Practical examinations of the first year to be clubbed with the second-year practical examinations.
- Consolidated mark sheets to be issued

G.O.146 dated 30.06.2017

Through this Government order, Curriculum Development Committee has been constituted under the chairmanship of Dr. M. Anandkrishnan, former ViceChancellor of Anna University, Chennai.

Members of the Committee:

Dr. R. Ramanujam, Institute of Mathematical Sciences, Taramani, Chennai

Dr. E. Sundaramoorthy, Former Vice Chancellor, Tamil University, Tanjore.

Dr. K. Ramasamy, Vice Chancellor, Agricultural University, Coimbatore.

Thiru. S. Theodore Baskaran, Writer and Environmentalist, Bengaluru

Dr. Sultan Ahamed Ismail, Former Head of the Department, Department of Bio -Technology, New College, Chennai.

Dr. R. Balasubramanian, Professor and Head of the Department, Chennai.

Dr. Kala Vijayakumar, Educationist, Chennai.

Thiru Trotsky Marudhu, Artist, Chennai.

Dr. G. Arivoli, Director, SCERT, Chennai is the Member-Secretary.

G.O. 147 dated 30.06.2017

This Government order has been issued for the reconstitution of the High-Level Committee for revamping School Education under the chairmanship of Hon'ble Minister for School Education, Sports & Youth Welfare, Government of Tamil Nadu. The following are the members of the Committee,

1. Secretary, School Education, Tamil Nadu.
2. Dr. E. Balagurusamy, Former Vice Chancellor, Anna University, Chennai.
3. Dr. Mayilsamy Annadurai, Director, ISRO, Bengaluru.
4. Dr. M.P. Vijayakumar, Retd. I.A.S.
5. Dr. C. Ramasamy, Former Vice Chancellor, Tamil Nadu Agricultural University
6. Dr. C. Subramanian, Former Vice Chancellor, Tamil University, Thanjavur.
7. Dr. A. Jothimurugan, Vice Chancellor, Thiruvalluvar University, Vellore.
8. Dr. S. Anathalakshmi, Educationist, Chennai.
9. Dr. G. Balasubramanian Former Director, CBSC, Chennai.
10. Director, Directorate of School Education.
11. Director, Directorate of Elementary Education.
12. Director, State Council of Educational Research and Training. Chennai -Member Secretary

First Meeting of Curriculum Development Committee

The First Meeting of Curriculum Development Committee was held in the Tamil Virtual Academy on 15.07.2017. Dr.M.Anandkrishnan, Chairman of the Curriculum

Framework Committee chaired the meeting. The following points were suggested in the meeting:

- Vision Statement for the curriculum should be constructed.
- Long term vision to be evolved
- Concept oriented teaching to be enhanced
- Training of teachers to be revised and redesigned
- Analytical skills to be fostered among students.
- Professional aspirations of the learners should be kindled.
- Project-oriented teaching and learning should be fostered.
- Intellectual debates should be encouraged.
- Sports to be given due importance.
- Art and culture should be given appropriate importance in the curriculum.

It has been resolved that as the process is very challenging, two sub-committees shall be formed to expedite the series of work relating to the curriculum.

Sub-committee-1

This committee has been assigned with the task of curriculum development for Mathematics and Science and its members are: Dr. R. Ramanujam, Dr. Sultan Ahmed Ismail, Dr. K. Ramasamy and Dr. Kala Vijayakumar.

Sub-committee-2

This committee has been constituted with Dr. R. Balasubramanian, Thiru Trotsky Marudhu, Thiru S. Theodore Baskaran and Dr. E. Sundaramoorthy to construct the curriculum for Arts and Humanities.

It was also decided that Dr. R. Ramanujam would prepare the Vision Statement of the curriculum and Dr. Anandakrishnan would prepare the Quality Statement.

Seminar on Developing New Curriculum

In the scenario of changing dynamics of school education, its goals and objectives are to be redefined. The students of Tamil Nadu should take up new challenges on the national horizon and it is the solemn duty of the Government to address this need on a war-footing. Need for such a change has been felt for quite some time and under the aegis of Hon'ble

Minister for School Education, Sports & Youth Welfare Thiru K.A. Sengottaiyan, reforms in School Education have been taking shape.

As part of these reforms, a Seminar on Developing New Curriculum was conducted on 20.07.2017 at Kalaivanar Arangam, Chennai. In this Seminar, practising teachers, educationists, thinkers and administrators took part to contemplate the course of changes that are about to be brought in. More than two thousand invitees - educationists, administrators, policy makers, doyens in the fields of school education and higher education, teachers, NGOs, publishers, authors, thinkers, writers participated. The distinguished speakers shared their views and suggestions for evolving and revising the curriculum for school education.

Academic Panel Discussions

The Seminar on Curriculum Development was followed by Academic Panel discussions for two days (21.07.2017 & 22.07.2017) on different subjects and academic themes in the Anna University campus, Guindy, Chennai. The idea behind such a massive exercise was to collect views from cross sections of the society on the changing dynamics of the school curriculum. The best practising teachers from Tamil Nadu and across the country were invited to contribute to the designing of the new curriculum, syllabus and developing textbooks from Standard I to XII.

Each session was chaired by a renowned university Professor/eminent scholar. The Chairperson made a lead presentation followed by experts' views. One subject expert played the role of a mentor throughout the discussion. ICT expert(s) came up with their suggestion for integrating the content materials with technology. The practicing teachers, among the panelists, also shared their ideas. At the end of the discussion in each session, the Rapporteur consolidated the important points discussed and presented a brief summary of all ideas emanated during the day's discussions on various topics. All these have been incorporated in the construction of the Curriculum.

Sub-Committee Meeting for Mathematics & Science

The first Sub-Committee Meeting for Mathematics & Science was held on 31.07.2017 in the Institute of Mathematical Sciences, Taramani, Chennai. Dr. M. Anandkrishnan, chaired the meeting. The Sub-Committee was particular in fixing a timeline for the tasks

related to the development of the curriculum. It proposed to conduct Zonal Level Consultative Meetings to elicit ideas and suggestions for the development of the Curriculum.

Zonal Level Consultative Meetings

Four Zonal Level Meetings were organized in the state and one in the Union Territory of Puducherry to elicit suggestions from Teachers, Parents, Professors, educationalists, subject experts and other stakeholders including the Public on the development of Curriculum, Syllabus and Textbooks. The following table contains the schedule of the meetings.

S.No.	Zone	Date	Venue
1	South	09.08.2017	Madurai
2	West	11.08.2017	Coimbatore
3	North	22.08.2017	Chennai
4	East	24.08.2017	Thanjavur
5	Union Territory	06.09.2017	Pondicherry

The following are some of the salient points emerged through the Zonal Level Consultative Meetings-

- The teaching of Tamil should encompass the culture and tradition of the Tamil. The Textbooks should contain the glossary of words, idioms and phrases.
- The teaching of English should focus on creative language skills. Communicative skills should be developed. Poems of Indian poets should be included in the textbooks.
- The teaching of Mathematics should have more practice in decimals. Tables may be given in the textbooks. Secondary level concepts should be linked with the Higher Secondary level ones.
- Science teaching should give more emphasis on lab activities. Traditional herbs and rural agriculture practices should be given more importance. Learning by doing should be promoted.
- Important places and their historical significance should be emphasised in teaching history. Knowledge and conservation of local natural resources should be incorporated in geography. Map reading is an important skill to be developed.

Also, the ideas and suggestions have been received from the students, teachers and parents through ‘Suggestion Boxes’ kept in all schools across the State. Various organisations including CII and newspapers including ‘Dinamalar’ have also offered suggestions in this regard. All these ideas have been consolidated and considered for the development of new curriculum.

Sub-Committee Meeting for Arts & Humanities

The first Sub-Committee Meeting for Arts and Humanities was held on 04.08.2017 in the Conference Hall, SCERT, Chennai. The Committee decided that Conservation of nature should be included in textbooks. Syllabus should develop life skills. More time should be given for drawing and painting to bring out students’ creative skills. More importance should be given to develop literary skills in English. Supplementary books for guidance should be given for each lesson. Changes should be brought in evaluation.

Second Meeting of Curriculum Development Committee

Dr.M.Anandkrishnan, chaired the second meeting which was held in the conference hall of SCERT, Chennai on 05.08.2017. He stated that Tamil Nadu Syllabus and Textbooks need to be compared with those of Kerala, Sri Lanka and other boards of school education before revising them. The Curriculum Development Committee opined to visit the schools of different boards such as CBSE, ICSE, Anglo Indian and Government in and around Chennai to study the salient features of the present system. The members suggested that Textbooks should be learner-friendly and helpful for meaningful learning of concepts. They also said that the Textbooks should speak about the Ethics and Cultural Heritage of Tamil Nadu. The other important recommendations were:

- Source Books for assessment have to be prepared along with Textbooks and Teachers Handbooks.
- Political history of Tamil Nadu should have a regional background.
- “Image Bank” should be created for the students to explore different places and concepts of History and Science.
- Curriculum should incorporate employable skills of children at the end of ten years of School Education.

The Committee also decided to install “Suggestion Boxes” in all the schools in the state to get suggestions from students, teachers and parents.

Curriculum Review Meeting

A Curriculum Review Meeting was held on 11.08.2017 in SCERT by the Secretary of School Education. The Secretary stated that Subject Committees for languages and social science need to be strengthened by adding a few more subject experts. The textbook writing team may include teachers from different streams like State Board, Matriculation, CBSE, ICSE, IGCSE and Academicians from apex institutions like SCERT Kerala, Azim Premji Foundation and Universities. Content writers should be identified separately for writing the lessons. Agencies / Private Publishers like Oxford, Pearson, and Collins may also be identified for textbook designing. The Textbook Development Team should also prepare teacher handbooks, student workbooks and e-content. A separate team for ICT should be formed with experts to develop the syllabus for ICT from 6th Std. onwards. The Secretary suggested that the Curriculum Committee can also invite suggestions from all the Teacher Associations.

Second Sub-Committee Meeting for Mathematics and Science

The second sub-committee meeting was held at Institute of Mathematical Sciences on 24.08.2017. It was decided that the first draft of curriculum document should be submitted in the first week of September 2017 and the second draft of the same should be submitted in the first week of October and this would be followed by preparation and submission of draft syllabus.

Blue print of the question pattern should be dispensed with. The SCERT has to take initiative to prepare glossary of words and scientific dictionary in Tamil. Supplementary books on specific topics of Mathematics should be published in order to strengthen the arithmetic skills of the learners. The in-service training should focus on i) Content materials, ii) Pedagogy and iii) Technology with evaluation procedures.

Third Meeting of Curriculum Development Committee

The meeting was held on 04.09.2017 in the conference hall, SCERT. The time schedule to finalize the draft curriculum, syllabus and textbooks was decided as follows.

Draft curriculum	September 3 rd week
------------------	--------------------------------

Draft syllabus	October 2 nd week
Textbook development	October 4 th week to January 1 st week

The mother tongue should be the medium of instruction at primary stage and Environmental studies should be included as a separate subject for 1st and 2nd standards. Separate teams should be constituted for preparing stage-wise teacher handbooks, student workbooks and e-content of textbooks.

Tamil Sub-Committee Meeting

This Sub-Committee met on 07.09.2017 at Tamil Virtual Academy, Chennai. In this meeting, four Syllabus committees for Tamil were formed at the Primary, Upper Primary, Secondary and Higher Secondary levels.

ICT Sub –Committee Meeting

The ICT Sub-Committee Meeting was conducted on 07.09.2017 in the Conference Hall, SCERT, Chennai. The members of the Sub-Committee shared and discussed their ideas on the agendas such as the existing ICT Curriculum and syllabus in other states, incorporating ICT in science from 6th Standard onwards and introducing ICT as a primer in lower standards from 1st to 5th standard and mode of assessment.

High Level Committee Meeting

Hon'ble Minister for School Education chaired the meeting, which was held on 14.09.2017 at the Secretariat, Chennai-9. The status and progress in drafting of the curriculum and syllabus was reviewed. Hon'ble Minister suggested that video-conference mode may be used to teach students for various subjects by the best teachers.

Social Science Sub-Committee Meeting

The Social Science sub-committee meeting was held on 15.09.2017 at Tamil Virtual Academy, Chennai. It was resolved that information on social responsibilities of children, organic farming, linkage of statistics with Economics should be incorporated in Social Science textbooks.

Third Sub-Committee Meeting of Mathematics & Science

The Third Sub-Committee Meeting of Mathematics & Science was conducted on 06.10.2017 and 07.10.2017 in the Conference Hall, SCERT, Chennai. The draft Syllabus for all the four levels was presented and discussed in the sub-committee meeting. The sequence and gradation of content from class to class was verified and ensured.

Sub-Committee Meeting on Evaluation

This meeting on Evaluation Reforms was conducted on 10.10.2017 in the SIEMAT hall, SCERT, Chennai. The following points were discussed to evolve Evaluation Reforms:

- Pitfalls in the current evaluation in School Education.
- Main Recommendations on Evaluation
- Guidelines for Evaluation of Languages
- The Role of Technology/ICT in Evaluation.

Sub-Committee Meeting for Vocational Education

The Sub-Committee meeting for Vocational Education was held on 11.10.2017 at Dhanalakshmi College of Engineering, Chennai. The members of the committee discussed about the updating of vocational curriculum and the subject streams to be incorporated in the vocational syllabus.

Fourth Sub-Committee Meeting of Mathematics and Science

The fourth Sub-Committee Meeting of Mathematics and Science was held on 12.10.2017 in the conference hall, SCERT, Chennai. In this meeting, the rationale adopted for additions and deletions in the draft syllabus of Mathematics and Science was discussed.

Fourth Meeting of Curriculum Development Committee

The Fourth Meeting of Curriculum Development Committee was conducted on 21.10.2017 in the SIEMAT hall, SCERT, Chennai. In this meeting, the Position papers of different subjects were discussed and finalised. The draft syllabus of all subjects was also discussed. It was resolved that Multi-Grade Active Learning Process (MGALP) may be adopted as the new elementary pedagogy, which is a shift from ABL. The salient features of MGALP were discussed.

Fifth Meeting of Curriculum Development Committee

The fifth meeting of the Curriculum Development Committee was held on 11.11.2017 in the conference hall, SCERT, Chennai. It was resolved to finalize the position papers of different subjects and draft syllabus for standard 1 to 12.

Documentation

Various activities and meetings conducted over the past six months (since the G.O.99 was issued in May 2017) in the path travelled in the endeavor of developing a new curriculum have been documented.

Draft Syllabus and Position Papers

The subject-wise Position Papers and draft syllabus for I to XII standards have been finalised and they are going to be released by the Hon'ble Chief Minister on 20.11.2017. The Position Papers and draft syllabus will, then, be uploaded on to the website. The final curriculum document will be uploaded in January 2018.
