

SECONDARY TEACHER EDUCATION CURRICULUM

Guidelines and Syllabi



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राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

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NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING.

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Foreword

It is well known that the National Council of Educational Research and Training (NCERT) is engaged in the task of improving school education. Since independence, all committees and commissions have laid stress on the better preparation of teachers through the existing pre-service courses being offered across the country. While teacher preparation area is one of the major concerns of the NCERT's Department of Teacher Education, it, on its own, cannot change the entire scenario. The variety of teacher education that exist in the country today is far from satisfactory.

To make a dent in the pre-service programme, the Department of Teacher Education has prepared guidelines and syllabus for both elementary and secondary teacher education. This, to my knowledge, is a continuation of the work which the National Council for Teacher Education (NCTE) took upon itself as far back as 1978. The document then prepared was called: 'Teacher Education Curriculum - A Framework', which met with partial success, because its acceptance varied from zero to one hundred per cent.

The Department of Teacher Education has also been the Secretariat of the NCTE. Therefore, the efforts of the Department sometimes came to be identified with the work of the NCTE. This document deals with the guidelines and syllabus for secondary teacher education. These guidelines are suggestive and not prescriptive in nature.

Needless to say that I appreciate the association of Prof. A.K. Sharma and Prof. R.P.Singh with this work. The Project Coordinator, the convenors from the Department, Regional Colleges of Education and other contributing participants in this project also deserve commendation for their industry and concern.

New Delhi
26 November 1990

K.Gopalan
Director
National Council of Educational
Research and Training

Preface

To improve the quality of school education, it is imperative to improve the quality of teacher education. To achieve this, the teacher education curriculum has to be suitably reviewed. In this context, 'Teacher Education Curriculum - A Framework' was developed by the National Council for Teacher Education in 1978 and was implemented in various teacher's training institutions with varied success.

Recent developments in our educational system have underscored the urgency of overhauling the teacher education system. In this context, the Department of Teacher Education, NCERT has undertaken the project entitled 'Development of Guidelines and Syllabus based on the Teacher Education Curriculum Framework for Elementary and Secondary Teacher Education'. In April 1989, a draft document was developed concerning the guidelines/syllabi at the elementary and secondary teacher education levels and was sent to various teacher educators, content experts for their comments/suggestions. Alterations/suggestions/modifications have been incorporated in the light of the feedback received from them.

The above document has now been divided into two volumes, viz; Volume-I (Elementary) and Volume-II (Secondary). This present volume dealing with Secondary Teacher Education Curriculum has been further reviewed and revised by various teacher educators especially concerned with secondary teacher education. It may be pointed out that these guidelines/syllabi of secondary teacher education curriculum are suggestive in nature and not at all prescriptive. These may not necessarily be applicable in all situations.

This project was initiated under the guidance of Prof. A.K.Sharma, former Head of Teacher Education Department and now Joint Director. My special gratitude is due to several contributing participants and teacher educators in India, especially Prof. R.N. Mehrotra, Prof. Y.P. Aggarwal, Prof. M.N. Deshmukh, Prof. S.P. Ruhela, Prof. D.Joshi, Prof. A.M. Hashmi, Prof. L.C. Singh, Prof. S.D. Roka, Shri. S.K. Malhotra and M.G. Bhagat and my esteemed colleagues Prof. A.N. Maheshwari, Prof. C. Seshadri and Prof. J.S. Grewal from Regional Colleges of Education and other contributors. I appreciate efforts of Prof. R.M. Kalra (Project Coordinator), Convenors, NCERT faculty members from other departments and Regional Colleges of Education for their team work in the completion of this project. Contribution of administrative staff and Smt. Suman Srivastva, Research Associate deserves special mention for their cooperation in the completion of this document.

Suggestions and comments, if any concerning these guidelines/ syllabi at the secondary level may be sent to Prof. R.M. Kalra, Project Coordinator, Department of Teacher Education, NCERT, Sri Aurobindo Marg, New Delhi.

New Delhi
26 November 1990

R.P. Singh
Head
Department of Teacher Education,
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Guidelines and Syllabi of Secondary Teacher Education Curriculum

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A.K. Sharma
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Project Coordinator
R.M. Kalra
Subject-Convenors

- A. *Foundation Courses*
1. Education in Emerging India — M.R. Chilana
 2. Educational Psychology — G.L.Arora
- B. *Stage Relevant Specialization*
3. Secondary Education and Teacher Functions — Ajit Singh
 4. Language Teaching
 - (a) Teaching of Hindi — Smt. R.K. Chopra
 - (b) Teaching of English Language — Smt. T.C. Daswani
 5. Teaching of Mathematics — K.M.Gupta
 6. Teaching of Science — R.M.Kalra
 7. Teaching of Social Sciences — U.S. Madhastha
 8. Teaching of Health and Physical Education — K.M.Gupta

9. Special Education for Disabled — N.K. Jangira
10. Teaching of Art Education — Smt. Janak Verma

C. Additional Specialization

11. Educational and Vocational Guidance — L.C. Singh
12. Population Education — O.P. Malik
13. Educational Technology — L.C. Singh

D. Practicum/Field Work

- School Experience Programme — Smt. R.K. Chopra
- Practical Work including working with
- Community and Social service
- Work Experience — D.D. Yadav
- Annexures

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Introduction

THE entire educational system of our country is in the process of change. We all know that no educational reform can be successful unless the quality of teacher is improved, but in turn the quality of teacher depends to a large extent on the quality of teacher education. In reality, teacher education is the very *sine qua non* of all educational improvements. The quality of teacher education of our country specially at the secondary level is far from satisfactory. This may be due to lack of focus on providing meaningful experiences to the student teachers especially at the secondary level. The focus of secondary teacher education should be to assist student teachers to take decisions regarding application of basic educational principles to the existing school situations without overlooking the characteristics of the learners. Thus, the professional education of secondary teachers must relate to pedagogy and the way instructional materials can be put to a judicious use. This envisages a teacher training which may suggest a way of working with young learners, to help them seek and find answers to problems of their immediate concerns. Thus, the

emphasis in the teacher education programme at the secondary level has to be on helping student teachers to acquire necessary insights and skills to enable them become effective teachers of young learners.

The above contentions have many ramifications and implications for teacher education curriculum. It is gratifying to note that some significant developments have already taken place in the field of teacher education. The National Policy on Education — 1986 suggested an overhauling of teacher education at all levels. A National Curriculum Framework for Elementary/Secondary School stages was developed by the NCERT keeping in view the major thrusts of National Policy on Education. All these significant developments had an impact on teacher education programmes resulting in the setting up of District Institutes of Education and Training (DIETs) at the elementary level and upgrading some colleges of education as Institutes of Advanced Studies in Education (IASEs) and strengthening of Colleges of Teacher Education (CTEs). These institutions are expected to contrib-

ute their mite in improving the quality of teacher education. It is now felt that to provide effective training experiences to the teacher trainees, different components of teacher education curriculum specially at the secondary level need to be reviewed and revised.

The present document containing detailed outline of the teacher education curriculum at the secondary level is based on NCTE curriculum framework especially revised draft version of framework (1988) developed by the Department of Teacher Education (NCERT).

Secondary Stage

The secondary stage extends over standards 9 and 10 and is meant for general education for all with proviso of a common curriculum for all. All

subjects except languages have to be taught as disciplines. The core curriculum aiming at national identity, cultural enrichment and concerns of environment etc., must be given due emphasis. Secondary school teachers have to be specialized in teaching one or two subjects and are expected to possess reasonable level of mastery in respect of content and pedagogy. Furthermore, the teacher of today is expected to play the multiple roles of a teacher. The special needs of exceptional children of different categories and activities related to in or outside the secondary school, such as Population Education, Educational Technology, Adult Education, Non-formal Education, etc, are some of the activities which may be included in the secondary teacher education curriculum. The curriculum components have been designed keeping these needs in mind.

<i>Curriculum Components</i>	<i>Weightage in terms of time</i>
A. Foundation Courses	20%
(i) Education in Emerging India (philosophical and socio-cultural perspectives)	10%
(ii) Educational Psychology (with focus on learner development and stages, learning adjustment)	10%
B. Stage Relevant Specialization	30%
(iii) Secondary Education and Teacher Functions	10%
Specialisation in methodology of:	
(iv) A secondary school subject with prior specialisation	10%

(v) A second secondary/Higher secondary/ primary school education subject	10%
C. Additional Specialization	10%
(vi) An elective from areas like: Adult Education, Secondary Education, Population Education, Distance Education, Library Services, Tribal Education, Special Education (Integrated and one category), Health and Physical Education, Art Education, Educational Technology, Action, Research, Computer Education, etc.	10%
D. Practicum/Field Work	40%
(vii) Internship in teaching including field assignments	20%
(viii) Practical work including working with community, social service and work experience	20%

The above course offerings have been divided into the following four major components as spelt out in the revised NCTE Draft National Curriculum Framework (1988):

- (a) Foundation Courses
- (b) Stage Relevant Specialization
- (c) Additional Specialization
- (d) Practicum/ Field Work

Foundation Courses: The foundation courses component of the teacher education curriculum may provide the student teacher necessary theoretical insights into the understanding of aims and objectives of education in the context of national development with reference to socio-cultural, politi-

cal and economic imperatives. Another objective is that the student teacher may acquire knowledge and develop understanding of the process of human development and learning.

Stage Relevant Specialization: This component may include historical background and scope of education at the stage concerned, e.g., elementary or secondary level and functions of the teacher with reference to curriculum planning, instructional strategies and skills, evaluation, management, guidance and counselling and co-curricular activities, etc.

Additional Specializations: The subject areas like educational and vocational guidance, educational

technology, special education and population education, etc; have been included in the teacher education curriculum to provide professional education to the student teacher in an educational area of his interest and to equip him/her with higher knowledge, understanding and skills in that area.

Practicum/ Field Experiences: This component deals with the central objective of teacher education viz; development of professional competencies with reference to the evaluating, managing classroom learning, organising co-curricular activities, guiding students and several other activities which may be 'beyond' the classroom.

Guidelines and Syllabi

The guidelines and syllabi developed in this document for the following curricular subjects at the secondary level have been developed through series of workshops held in 1989 and 1990.

Foundation Courses

1. Education in Emerging India
2. Educational Psychology

Stage Relevant Specialization

3. Teacher Functions
4. Language Teaching
 - (a) Teaching of English
 - (b) Teaching of Hindi
5. Teaching of Mathematics
6. Teaching of Science
7. Teaching of Social Studies/ Social Sciences
8. Teaching of Health and Physical Education
9. Teaching of Art Education

Additional Specialization

10. Educational and Vocational Guidance
11. Population Education
12. Educational Technology
13. Work Experience
14. Special Education

Practicum/ Field Work

- (i) School Experience Programme
- (ii) Practical work including working with community, social service and work experience.

The detailed guidelines and syllabi alongwith suggested weightages in terms of time are given in the chapters that follow. It is also suggested that while evaluating the student's performance, 40% weightage may be given to internal assessment.

Thus, the guidelines and syllabi given in the present document are based on the Teacher Education Curriculum Framework for Elementary and Secondary Levels. These guidelines/ syllabus outlines are suggestive and not prescriptive in nature. These may not necessarily be applicable in all situations due to constraints of time and resource facilities. It is also suggested that teacher educators may make use of appropriate modalities for transacting different units of the suggested syllabi. Furthermore, the Council has plans to develop instructional materials based on these suggested guidelines/syllabi. Therefore, we have not incorporated suggested readings in this document. Practicum/ field work component has been discussed in the school experience and work experience components of this document. Practical work

including working with community and social service has not been discussed in detail due to different and varied needs and requirements of the community. The Review Committee also suggested that 25% weightage may be given to school

experience programme due to numerous activities relating to school education and 15% weightage may be given to practical work relating to working with community, social services and work experience.

(a) Foundation Courses

Education in Emerging India

THE National Policy on Education recommends an overhaul of the existing system of teacher education in order to make it responsive to the changing needs, aspirations and demands of the society. This implies that the entire body of principles and practices pertaining to teacher education—its structure, curriculum organisation, transaction and evaluation, should undergo drastic revision and reform. Accordingly, a new National Curriculum Framework for Teacher Education has been designed by the NCTE, building on the strengths of the earlier curriculum framework and also accommodating the new and emerging national concerns and imperatives.

An important component of teacher education curriculum is what is normally referred to as the 'foundation component.' This component seeks to provide the prospective teacher with relevant functional understanding of educational theory in a philosophico-socio-cultural context. In the earlier framework, this was organised around the course—Teacher and Education in the Emerging Indian Society. In the new curriculum framework, the

entire foundations component has been subjected to a critical scrutiny keeping in view the new concerns and imperatives which have emerged during the past two decades, the thrust areas of the National Policy on Education and the experiences gained from the implementation of the earlier curriculum framework with particular reference to this part. While retaining the original spirit and philosophy, the course under the new title 'Education in Emerging India' has a fresh look both in matters of its form and content.

Rationale of Course

'Education in Emerging India' in the new curriculum framework had marked a major effort to do away with discipline-oriented educational theory courses like philosophical and sociological foundations of education, and organise relevant educational understanding around interdisciplinary themes. The new course is based on a reiteration of this principle.

The course 'Education in Emerging India' seeks to develop understanding of Indian education—

technology, special education and population education, etc; have been included in the teacher education curriculum to provide professional education to the student teacher in an educational area of his interest and to equip him/her with higher knowledge, understanding and skills in that area.

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6. Teaching of Science
7. Teaching of Social Studies/ Social Sciences
8. Teaching of Health and Physical Education
9. Teaching of Art Education

Additional Specialization

10. Educational and Vocational Guidance
11. Population Education
12. Educational Technology
13. Work Experience
14. Special Education

Practicum/ Field Work

- (i) School Experience Programme
- (ii) Practical work including working with community, social service and work experience.

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entire foundations component has been subjected to a critical scrutiny keeping in view the new concerns and imperatives which have emerged during the past two decades, the thrust areas of the National Policy on Education and the experiences gained from the implementation of the earlier curriculum framework with particular reference to this part. While retaining the original spirit and philosophy, the course under the new title 'Education in Emerging India' has a fresh look both in matters of its form and content.

Rationale of Course

'Education in Emerging India' in the new curriculum framework had marked a major effort to do away with discipline-oriented educational theory courses like philosophical and sociological foundations of education, and organise relevant educational understanding around interdisciplinary themes. The new course is based on a reiteration of this principle.

The course 'Education in Emerging India' seeks to develop understanding of Indian education—

its concepts, processes, practices and principles in an interdisciplinary perspective, taking into account their philosophical, sociological, historical, political and cultural dimensions. Its main aim is to provide necessary insights into the meaning and aims of education and its role in national development in the light of emerging socio-cultural, political and economic concerns and imperatives. What is aimed at is not an in-depth, scholarly understanding of theory as such, but a broad functional acquaintance with educational goals, processes and issues influencing the work-a-day world of the teacher.

The course is designed on the premise that the role of the modern teacher is multi-dimensional covering, in addition to the immediate concerns of classroom teaching, such supplementary tasks as implementation of compensatory education programmes, participation in parallel educational services, working with the community and promotion of environmental awareness, scientific outlook, secularism and understanding of our cultural heritage.

The course, as the title bears out, is culture specific. It focusses on themes and issues which are of "here and now" concern to Indian education. These themes and issues are derived from the analysis of the existing socio-political reality and critical appraisal of the state of education in the nation and the role education has to play in future, as visualized in the different national documents on education.

The course embodies all current developments in Indian education that have found articulate

expression in policy documents and reports of committees and commissions viz., the Essence and Role of Education, National System of Education, Education for Equality, National Curriculum Framework, Child-centred Approach to Education, Value Education, etc.

The course is not an aggregate of topics and themes. What lends unity and continuity to the themes is their inter-connectedness and the inter-relationship between education and society runs through the treatment of the topics.

Objectives

The broad objectives of this course are to enable the prospective teachers to develop necessary understanding and insight into:

- The nature of the Indian society as it has evolved from the past, as it is today and as it is likely to develop in the future.
- The integral relationship between education and society with specific reference to the contemporary socio-cultural, political and economic issues.
- The role of education in national development.
- The multi-dimensional nature of teacher's role as a catalytic agent in the society.

Selecting and Organising Course Content

Structurally, the course can be seen to comprise three natural components: education, society and

teacher. The content for the course would accordingly deal with knowledge and understanding pertaining to these components and, more importantly, their inter-relationships.

The course content can be derived from the following sources:

- Further analysis of the objectives of the course and the overall objectives of the teacher preparation programme in terms of the specific functions of the teacher and knowledge and understanding needed to perform those functions effectively.
- Current and emerging socio-politico-economic concerns and the needed responses of the educational system to deal with them.
- Thrust areas of National Policy on Education to relate education and development.

Apart from the above sources, some essential content is to be drawn also from the related disciplines (philosophy, sociology, economics, etc.) both to provide basic understanding of educational concepts and processes and to impart unity to the learning experiences provided under this rubric.

While organising the content, the following guidelines may be kept in view:

- The content taken as a whole should exhibit unity and inter-connectedness rather than appearing as an assemblage of topics.
- Inter-relationship between education and society will be the running theme through-

out. It will act as the unifying thread for all the different content themes.

- Each broad theme (a problem, an issue, an academic topic) should provide for understanding of basic concepts, principles and explanations necessary for understanding that theme.
- The different educational issues and problems are to be presented highlighting their inherently inter-disciplinary nature and specific role implications for teachers.

The general outline and structure of the course will be the same for both the elementary and secondary stages. However, considering the age group, entry level educational background and the levels of schooling for which the two groups are prepared, the following differences should be reflected in the design and treatment of the course for the two groups:

- The design and organisation of the course for the secondary groups should be such that it also facilitates the study of education as a discipline in its own right at the post-graduate stage.
- Treatment of the topics at the secondary level will be more detailed, formal and abstract in keeping with the academic background of students at this stage. It would be more concrete and broad at the elementary stage.
- While most of the topics would be the same, the significance and relevance of some topics and aspects of topics vary from elementary to secondary stage. This differ-

ence should be reflected in the content. For example, with reference to "equalizing educational opportunity", the focus at the elementary stage will be on universalization and related issues and at the secondary stage it will be mostly on qualitative aspects and diversification of evaluation.

Curriculum Transaction

The course is essentially inter-disciplinary in nature, drawing from the disciplines of philosophy, history, political science and sociology. The major objective is to enable students to understand the integral relationship between education and society with the emphasis on the role of education in promoting values based on our heritage, national goals and universal perceptions. The course is expected to help and develop necessary changes in perceptions and insights into the issues and problems confronting the emerging Indian society and to develop its capability to use education as a potential tool to deal with such issues. This special feature of the course makes it imperative to adopt a flexible mode of curriculum transaction emphasizing participatory and interactive learning and calling for greater student involvement and initiative. The course also provides a good opportunity to foster 'learning to learn' skills emphasizing training in the use of different learning resources: library, laboratory, educational media and materials.

In situations governed by accent on 'learning to learn' and participative learning, the role of the teacher educators would change with respect to the structuring of learning situations, teaching techniques, strategies and attitudes. The changes

include: more importance to student inquiry and problem solving, a cooperative and equal working relationship, mastery of the sources of knowledge and methods of inquiry than of knowledge itself, acceptance of new sources of learning both in media and community.

The actual strategies and approaches emphasizing such participatory learning are numerous. However, a few may be mentioned here for purpose of illustration. These are: inquiry and problem approaches, group discussion, seminar, project work, individual tailored work assignment, study of self-learning materials, assignments, brainstorming and team teaching.

Practical Work

Although, 'Education in Emerging India' is a foundation course with its major objective being the development of theoretical understanding of educational issues, every effort must be made to present the students with the interface between the theory and the practice. It is only when a student is able to relate these two that he can be said to have developed a comprehensive understanding of the issues under consideration. Accordingly, the course should provide for ample practical exercises for the students to acquire a realistic understanding of educational issues.

Activities related to practical work may include surveys, home assignments, library study, observations, interviews and projects involving working with the community.

It is possible to identify such practical activity for most of the units/sub units in the course. A few

examples may be given here. Understanding of the contemporary Indian society would lead to such practical activities as survey of socio-economic-educational needs of the people living in rural areas and the study of educational problems of the disadvantaged groups. Practical work related to the understanding of the process of social change may include projects on the status and acceptability of change in the society, awakening of political and social consciousness among different sections of the population. A variety of practical activities mainly involving working with the community may be organised under the section 'Teacher, School and Society'. These relate to the role of the teacher with reference to universalization of elementary education, promotion of the values of secularism, peace, equality, social cohesion and national unity, population control and quality of life, conservation of environment and understanding of our cultural heritage. The activities may take the form of participation in programmes of universalization of elementary education, non-formal education, compensatory education for the disadvantaged, activities of NSS, social service activities like planting of trees, improvement of village sanitation and cleanliness, and campaigns on promotion of awareness on social concerns like population and environment.

Evaluation

The course seeks to develop competencies in both the theoretical and practical learning. Accordingly, appropriate evaluation tools are to be designed to provide for the evaluation of a comprehensive range of competencies covering knowledge, understanding, application and attitudinal

changes. Evaluation should also be continuous taking into account student's performance in written tests, project work, participation in activities and initiative, enthusiasm and motivation to carry out the activities. Summative evaluation may take the form of a final examination in theory covering the entire course.

Textbooks and Instructional Materials

'Education in Emerging India' represents an effort to bring together relevant educational understandings from several disciplines in order to highlight the essentially inter-disciplinary nature of educational theory. Mapping the contours of this knowledge field, therefore, becomes a task of great importance. This task can be performed at two levels: sketching the content outlines of the course and designing of textbook and instructional materials. The latter is of particular significance for it is the textbook that to a large extent, determines the extent and quality of curriculum transaction and even sets standards and norms. While developing textbooks and instructional materials in this area, the following points may be kept in view:

- Although the stress is on inter-disciplinary understanding, basic concepts necessary for understanding educational issues should be introduced systematically using suitable illustrations and examples.
- Factual information wherever necessary be presented with supportive data; illustrations, pictures and diagrams.
- Each issue/problem should be analysed into its various dimensions in inter-disciplinary

perspective and the role of teacher in meeting the issue/problem should be made explicit.

- Recommendations of various committees and commissions on different issues and problems should be integrated suitably with the respective content, themes avoiding inde-

pendent and exclusive treatment of such recommendations.

- Treatment of content theme should be such that it generates a variety of different levels of activities to be undertaken by students within the classroom and on the field.
- The book can also be designed and developed as a package of self instructional modules.

Syllabus

SECTION I

Emerging India

- | | | |
|----------|--|-----------------|
| 1 | <i>Our heritage</i> | 10 Hours |
| | <ul style="list-style-type: none"> — Our common cultural heritage — its compositness, unity, richness and continuity. — Our philosophical traditions — central teachings of Indian philosophy (ethics and epistemology). | |
| 2 | <i>Contemporary scene</i> | 10 Hours |
| | <ul style="list-style-type: none"> — Indian social system: its structure, class, caste stratification and mobility. — Social, economic, political, technological forces acting on the society. | |
| 3 | <i>Emerging future</i> | 10 Hours |
| | <ul style="list-style-type: none"> — India toward modernization: attributes and demands of modernization. — Constitution of India: values of democracy, socialism and secularism. — Constitutional rights and obligations. — Emerging directions for modernization including futurology and education. | |

SECTION II

Education and Society

- | | | |
|-----------|---|-----------------|
| 4. | <i>Education</i> | 10 Hours |
| | <ul style="list-style-type: none"> — Its meaning and aims, factors influencing educational aims — philosophical, socio-cultural, political and economic. | |

- Education as a social institution.
- Educational aims in a global perspective (a panoramic view of educational aims in different civilizations and during different historical periods).
- Educational aims for modern times — India, world.

5 *Our educational heritage* 9 Hours

- Education in ancient and medieval period.
- Education under the colonial rule.

6 *Education and national development* 10 Hours

- Efforts towards educational reconstruction—educational contribution of Mahatma Gandhi.
- Education as an aspect of planned development — education in the Five Year Plans. Education and human resource development.
- Evolution of the National System of Education — overview of the recommendations of the Secondary Education Commission and the Education Commission (1964-66), National Policy on Education.

7 *Education and social change* 9 Hours

- Meaning of social change — factors influencing social change.
- Nature of social changes in India — change, traditions and modernity.
- Role of education in promoting desired social changes.

SECTION III

8 *Equalizing educational opportunity* 7 Hours

- Meaning of equality of opportunity at the primary, secondary and higher education stages, access and success, understanding the measures to promote equality of educational opportunity: protective discrimination, compensatory education programmes, meeting the educational needs of special groups: SC/STs, women, disabled — implementing compensatory educational actions in schools and in community.

- 9 *Fostering the secular and scientific outlook* 6 Hours**
- Interpretations of secularism and scientific outlook.
 - Understanding the challenges to secular and scientific values — promoting secular and scientific outlook.
- 10 *Social cohesion and national unity* 6 Hours**
- The unifying and divisive forces — dealing with divisive forces, promoting national identity, education for emotional integration.
- 11 *Education for peace* 6 Hours**
- Peace, cooperation, disarmament — fostering peace values, education for peace and international understanding.
- 12 *Environment* 6 Hours**
- State of the environment — global, local understanding, the causes of environmental degradation; environment and development, conservation and protection of environment, role of individuals and pressure groups, learning to live in harmony with nature.
- 13 *Dealing with population increase* 7 Hours**
- Understanding the population phenomenon — population and development, population pressure on environment, population and quality of life; factors dealing with population increase — promotion of small family norm; the concept and practice of population education.
- 14 *School community relationship* 8 Hours**
- Interdependence of school, community and parents.
 - Understanding and working with the community.
 - Ways and means of coordinating school-community functions.
- 15 *Teaching as a profession* 6 Hours**
- The characteristics and demands of the teaching profession — professional development and professional ethics.
 - Moral education and value orientation, role of the teacher, curricular changes and general atmosphere in schools.

Educational Psychology

EDUCATION has long been regarded as an organised endeavour to develop desirable behaviour in the child. While the question, 'what behaviours are desirable' has been a fascinating study to philosophers, the question 'how and at what stage these behaviours can be developed' has been exercising the minds of educational psychologists. Attempts of the philosophers and psychologists to examine the what, when, why and how dimensions of learner's behaviours have tended to bring into focus the roles of three important factors in the teaching learning process. These are:

- (i) the society which sets the goals and objectives of education,
- (ii) the school system that strives to achieve the objectives, and
- (iii) the learner for whom the educational inputs are designed by the society and the school system for developing the intended behaviours.

The success and effectiveness of any educational institution needs to be judged in terms of its ability to create nurturing conditions

for the development of appropriate behaviours as well as to offer facilities for the achievement of the academic, social, emotional, moral aesthetic and physical development of the learner. Educational psychology is one of the most important courses of study in teacher education programme. It seeks to help a prospective teacher or an educational administrator to develop insight into the development of attributes and behaviours of the learner as well as of his own, and the factors which influence or determine the same. However, achievement of this goal is contingent upon the selection of such theoretical contents and activities as will be of use in the proper preparation of the teacher in terms of knowledge, understandings, attitudes, interests, values and skills relating to teaching profession. A course in the psychology of teaching-learning and human development, therefore, should have the following objectives.

Objectives

The course in educational psychology is meant to help the student teacher to:

- Appreciate the need and significance of the

study of educational psychology in understanding, analyzing, interpreting and guiding the development of the learner in general and during adolescence in particular, with reference to the secondary stage in Indian context.

- Understand the process of development in its different dimensions, (physical and motor, cognitive and language, emotional and aesthetic, social and moral) and the factors affecting them.
- Understand the needs, tasks and problems of adolescents in the development of mature, well-integrated and balanced personality.
- Understand the nature, extent and causes of individual differences among children.
- Have the working knowledge of strategies and techniques for helping children with special needs, especially in integrated settings.
- Understand the nature and process of learning and the factors/conditions and tactics which facilitate or obstruct learning.
- Design learning situations to enable learners to use various styles and strategies of learning.
- Understand the principles and techniques of attitudinal change and behaviour modification/management.
- Understand group structure and dynamics as

relevant to school groups in general and classroom groups in particular.

- Choose and use appropriate psychological tests in educational guidance settings.
- Apply the knowledge of principles and techniques of educational psychology to facilitate optimum and wholesome learning, development and adjustment.

Growing Science

Educational psychology is a growing science. During the past few decades, a vast amount of knowledge (and its application) has been accumulated about various aspects of the teaching learning process and human development. Each aspect may have some sort of relevance for the tasks, functions and roles expected of a teacher. To include all such aspects in the syllabus of teacher education programme may not be feasible due to constraints of time. Thus, the criteria of relative usefulness and relevance to the course objectives as well as teacher functions should be judiciously applied in selecting the content. The amount of content should be such as can be managed within the available time during the teacher education programme.

The main aim of education is to nurture the all-round development of the learner. It is essential for a teacher to know and understand the processes involved in human growth, especially during formative years. The teacher has to keep in mind that a learner is a whole person—a bio-psycho-social organism with various potentials which have to be

actualised to develop him into a complete person. However, the psychology of individual differences should be taken into account in designing and applying teaching learning strategies to make the learning process need based and learner-centred as far as possible.

The student teacher must understand inter-relationship among different aspects of development, such as physical, social, emotional, moral, intellectual, etc. He should also understand how to help the learner develop into a wholesome, well adjusted and productive personality.

Learning is pivotal to all aspects of human development, particularly during childhood and adolescence. Hence, the teachers should have deep understanding of the nature, types and processes of learning, factors ensuring successful learning and retention and transfer of learning. Thus, while developing the course in educational psychology, learning should be assigned a central place.

One of the important focal points of the teaching learning process should be to nurture creativity in every learner. It is indeed unfortunate that in our educational system this is ignored. The teacher, therefore, must be conversant about its nature and various strategies to nurture it.

A secondary school teacher will have to deal with adolescents. Therefore, it becomes imperative for him to understand the characteristics of adolescent learners. He should also understand their special needs and problems and the methods and techniques of providing educational, voca-

tional and personal guidance to them. These should be kept in mind while dealing with different units included in the course.

Children, particularly those belonging to disadvantaged sections of the society, have some special learning needs and difficulties which should be identified and appropriate learning conditions organised to meet such needs effectively. Children with varying degrees of physical or mental disability also constitute a sizeable section of the school going population. It has been found that children with mild disabilities are best educated in the company of normal children studying in general schools. During the past few years, Integrated Education for the Disabled (IED) has developed as a specialization within education, and a large body of knowledge concerning methods and techniques of integrated education has accumulated. The student teacher needs to be made well conversant with methods and techniques of educating children having different types of disabilities. It will be in the fitness of things if some significant and relevant aspects of IED are incorporated in the course in educational psychology.

A learner has to function in different types of groups in and outside the school. The prospective teacher should know how to use appropriate techniques for managing the behaviour of learners in classroom, play and other types of group situations. He should also know how to employ and adopt group dynamics to promote learning and development of the individuals. Besides, he should also learn the techniques for maximisation of interaction between teacher on one hand and learners on

the other, as well as among the learners themselves in group situations in a highly favourable and conducive climate.

It is often stated that teacher educators generally tend to sermonise about virtues of certain methods which they themselves hardly practise. In educational psychology, they are expected to discuss child centred education, maximisation of classroom interaction, guidance and counselling, etc. and how to reflect them in teaching. They themselves should be in a position to make the best possible use of interactive, participatory style of teaching along with expository style. This they can do by promoting dialogue in the classroom between the teacher educators and the student teachers and among the student teachers themselves in group situations. They should also know how to identify the trainees having some sort of problems and counsel them suitably.

While the behaviourist position and interpretation (relatively narrow and superficial) that have dominated psychology may be given its due place and accommodated for its practical relevance and utility, its limitations and weaknesses have to be corrected by dominant humanist-cognitive approach and emphasis.

Educational psychology is a science and, therefore, there is considerable scope for practical work in it. Participation in practical activities will help in clarifying the concepts explained by the teacher educator. For example, the trainees should be provided the experience of observing child

behaviour, preparing case studies, and providing guidance and counselling to children having some problems. They should also be provided opportunities for the administration, scoring and interpretation of psychological tests.

Educational psychology is an applied science. Applicability of its knowledge to educational situations should be the guiding principle in the selection and treatment in this course. The teacher educator should illustrate the concepts and principles of educational psychology with the help of concrete examples drawn from the experiences of learners and teachers. The classical experiments, if explained quoting the interpretations and illustrations given by the scientists, will be of no use unless these are supplemented by examples from daily life and classroom experience of teachers. What is important is not to describe or explain the contents included in the textbook, but to thoroughly work out the implications of the concepts for educational situations.

The textbooks used in teacher education institutions in India are mostly based on the books written by foreign authors. These books sometime include examples from the settings which are alien to our conditions. Many a times, the developmental norms given in these books, are not in respect of Indian population. The textbook authors and teacher educators will do well to give Indian orientation to the treatment of this course. This will also include discussion and assessment of the relevant work done by Indian researchers on various aspects of educational psychology.

Syllabus

Unit 1 : Understanding the nature, role and methods of psychology in Education 10 Hours

- Meaning, nature and scope of educational psychology
- Relevance of educational psychology for the secondary teacher in understanding the learner and his development, including learning and adjustment.
- Methods to study learner's behaviour at the adolescent stage: observation, interview, experiment, socio-metry and case study

Unit 2 : Understanding the growth and development of the learner 15 Hours

- Concept of growth and development, general principles of development, dimensions and stages of development, developmental tasks
- Factors influencing development (genetic, physiological and environmental)
- Physical and motor development
- Cognitive development (based on Piaget, Bruner, etc.)
- Language development (elements, skills, semantics, syntax and structure briefly)
- Emotional and aesthetic development
- Social development
- Moral development (with brief reference to Kohlberg, Piaget, Bull and Bobroff)

Unit 3 : Understanding the learners as individuals 15 Hours

- Meaning and significance of the study of individual differences (both inter and intra-individual differences)
- Factors causing individual differences: genetic, physiological, environmental, socio-cultural, home, school, community and peer group
- Areas of individual differences—
 - (a) Abilities : intelligence or cognitive abilities, creativity, aptitude and their measurement
 - (b) Achievement (scholastic achievement and skills/proficiencies)
 - (c) Affective : interests, attitudes, values

- (d) Other personality qualities: self-concept, achievement, motivation, level of aspiration
- Qualities of good tests: choosing and using appropriate tests
 - Catering to individual differences: common measures, special techniques, strategies and systems

Unit 4 : Understanding learning

25 Hours

- (i) Concept of learning: learning vis-a-vis maturation and development
- (ii) Significant concepts and principles of learning (drawn from different theories and propositions without dealing with theories as such and introduced, interpreted and illustrated with reference to different life situations in general and classroom learning situations in particular, pointing out clear implications for teaching-learning)
- Learnings: cognitive, affective, psycho-motor, conditioning vrs. insightful learning, relationship with behaviour or performance and maturation
 - Classical conditioning and operant conditioning
 - Readiness: maturational, motivations, pre-requisite capabilities
 - Association by similarity, contrast, contiguity (spatial, temporal), cause-effect, etc.
 - Meaning: inherent, logical and personal
 - Selection, sequence, structure, conscious and unconscious filtration
 - Stimulus/response generalization and differentiation: progressive shaping and fading, cumulative construction
 - Stimulus variation: prompting and cueing (active responding)
 - Effect reinforcement/feed-back/confirmation, knowledge of results
 - Repetition/practice, massed vrs. spaced/distributed practice, fatigue
 - Whole vrs. part learning, progressive parts learning
 - Modelling and identification, observation and imitation
 - Meaningful reception learning, advance organisers and self-appropriation
 - Trial and error, hypothesising and try-out/testing
 - Learning assignments and contracts, learning groups and processes
 - Pro-active and retro-active inhibition/interference, transfer and application of learning
 - Insightful learning, productive thinking, problem-solving
 - Discovery learning (self or autonomous, guided, etc.)
 - Cognitive strategies, styles, preferences

Units 5 : Understanding further issues relating to learning 15 Hours

- Motivation: meaning, importance, relationship, methods, cognitive and ego-integrative motives
- Memory: STM & LTM, effective conditions and methods, interference
- Transfer of learning: concept, significance, facilitative conditions and methods
- Learning of concepts and principles: attitudes and values and skills (principles and guidelines)
- Factors influencing learning (only a brief mention)
 - (a) Learning factors : age, sex, intelligence or cognitive abilities, previous achievement, prerequisites, interests, needs, motives and adjustment, cognitive styles and strategies
 - (b) Teacher factors : attitudes, competencies, personality and mental health
 - (c) School factors : organisational climate, learning facilities and physical conditions
 - (d) Home factors : intellectual and cultural, socio-economic status, social-emotional climate, facilities

Unit 6 : Understanding the classroom group and group process 10 Hours

- Structure and characteristics of classroom group
- Social and inter-personal relations, sociometry and grouping
- Dynamics of classroom group
- Social-emotional climate : (features and factors) interactive process in the total class, and sub-group processes in learning/productive tasks, learning groups and styles

Unit 7 : Understanding the learner's personality and adjustment 10 Hours

- Concept of personality: types, dimensions, trait factors
- Concept and criteria of a mature, balanced, well integrated personality — the humanistic view
- Concept and mechanisms of adjustment, common maladaptive behaviours
- Mental health and hygiene: the preventive, constructive and curative functions of the school/teacher
- Assessment of personality (only introduction)
- Observation and interview, situational tests, inventories and scales
- Projective techniques, Rorschach ink blot test and thematic apperception test

Unit 8 : Understanding and helping learners with special needs (a general and brief introduction) 10 Hours

- Identifying learners with special needs, difficulties and problems arising out of them
 - (a) Physical disabilities (sensory, orthopaedic, others)
 - (b) Intellectual deficiency or mental retardation
 - (c) Giftedness and creativity
 - (d) Specific learning disabilities (common types)
 - (e) Low achievement and under-achievement, slow learning
 - (f) Social-emotional (behavioural) disorders such as delinquency, truancy, withdrawal, day-dreaming, etc.
- Measures for overcoming their difficulties and facilitating optimum learning and development

PRACTICUM

10 Hours

- Preparation of observation schedule and interview schedule and their uses.
- In-depth study of a child experiencing some adjustment problems (a case study)
- Administration, scoring and interpretation (of scores) of intelligence tests, interest inventories, personality tests, etc.
- Understanding of a classroom group structure through sociometric test
- Surveying a class/group — learning needs/problems/preferences/behaviour peculiarities
- Observing and reporting (special education) practices.

(b) Stage Relevant Specialization

Secondary Education and Teacher Functions

THE role of a teacher is undergoing a transformation due to socio-political changes, explosion of knowledge and advances in pedagogical science, etc. Highlighting this aspect, the National Policy on Education (1986) states that 'Teachers will have multiple roles to perform—teaching, research, development of learning resource material, extension and managing the institution'. In view of the multiple roles expected of teachers, a need was felt for a separate course entitled 'Secondary Education and Teacher Functions' in the teacher education curriculum.

The content of this course needs to be only such as would help student teachers to acquire necessary knowledge and skills to perform the said roles. Prospective teachers are, therefore, required to be exposed to suitable experiences to understand the general aims and objectives of secondary education and their role vis a vis the community. They have to understand the relationship between the school and the community. The school as an

institution can not exist in isolation as it tried to do it in the past. In the light of the changing relationship between school and the community, the role of a teacher is different now. He can not be viewed as a mere functionary operating within the four walls of the classroom. He has to step outside the bounds of his environment and be prepared to move with the community around him. While it is necessary that the resources of the school are made available to the community, it could also draw upon the skills and expertise available in the community by creating climate conducive to mutual and productive endeavours. Besides, a student teacher need to be made aware of his role vis a vis non-formal and adult education.

Apart from acquiring teaching skills to teach effectively in the classroom, student teachers should understand the learner-centred approach and learn its use in the teaching-learning process. There is also the need to help student teachers to understand the concept of 'action research'. Suitable

experiences are required to be provided to them for identifying the problems and solving them through experimentation/action research. This would help them to solve their classroom problems through experimentation when they become teachers.

Managing the institution is an important function of a teacher as visualized in the NPE (1986). The management of human and material resources is an important input for qualitative improvement. This aspect has, therefore, been included in the course. Similarly, the place of co-curricular activities in a school, principles underlying the organisation and management of these activities need to form a part of content of this course. These experiences would help teachers to link co-curricular activities with curricular areas.

Evaluation is an important function of a teacher. Capabilities in this regard need to be developed in prospective teachers so that they are able to discharge this function effectively. Concept of evaluation, process of evaluation, etc. should form a part of this course. This however, needs to be dealt with in this course in a general way.

Each teacher needs to observe a code of conduct which forms part of his professional ethics. Unless this is done, it is difficult to raise the status of teachers in our society. Student teachers should be made to understand the concept of professional ethics, its dimensions and knowledge about state education code. The development of work ethics would go a long way in helping the teachers to discharge their different functions effectively.

Guidelines

The course consists of nine units. This course is to be given 10 per cent weightage in terms of time in the curriculum for preservice teacher education programme for secondary stage. Thus, the total time to be devoted to this course is 120 hours. The time allocated for different units is given below:-

Unit I	12 hours
Unit II	12 hours
Unit III	22 hours
Unit IV	12 hours
Unit V	12 hours
Unit VI	15 hours
Unit VII	15 hours
Unit VIII	15 hours
Unit IX	5 hours
	<hr/>
	120 hours

This time frame for different units is only suggestive. Each teacher educator may make changes in this time frame in the light of the background of his/her student teachers.

The transaction of different units appropriately is very important for realising the objectives of the course. The nature of content included under different units demands from teacher educators varying modes of transaction. The transaction mode for each unit has been specified under each unit. This too is suggestive. Teacher educators may use the suggested mode or any other appropriate transactional modality considered more useful by them. Since the effectiveness of the course depends to a great extent on its transactional modality, teacher educators are required to pay

adequate attention to the mode of transaction for different units/ content within a unit.

Objectives

The major objectives of the course on secondary education and teacher functions are to:

- Develop in the student teachers clear perception of the role and functions of a teacher as envisaged in the NPE (1986)
- Develop an understanding of the brief historical background of Indian education with special reference to secondary education
- Develop an understanding of the objectives and scope of secondary education
- Acquire proficiency in the use of core teaching skills
- Understand the concept of instructional technology
- Develop capabilities in organising co-curricular activities
- Develop capabilities to identify problems and conduct research
- Acquire experiences in conducting continuous and comprehensive evaluation; and
- Develop an awareness of the professional ethics.

Syllabus

Unit I : Secondary education: its objectives

12 Hours

General aims and objectives of secondary education , significant developments in secondary education during post-independence period, main features of secondary school curriculum and the process of curriculum development in secondary education

Unit II : Teacher's role and the national system of education

12 Hours

Teacher's role as facilitator of learning, teacher's role vis-a-vis transaction of curriculum, teacher's role in preparing students to encounter future challenges, teacher as a link between the school and the community, teacher as a mobiliser of community resources, role of a teacher vis-a-vis non-formal and adult education

Unit III : (a) Communication process

22 Hours

- Meaning and significance of communication process in teaching-learning

- Teaching as a communication process
- Intrapersonal and interpersonal communication
- Factors affecting communication

(b) *Core teaching skills*

- Introducing a lesson
- Writing instructional objectives in behavioural terms
- Achieving closure
- Questioning
- Stimulus variation
- Explaining
- Demonstration
- B.B. writing

Unit IV : Co-curricular activities

12 Hours

- Place of co-curricular activities in a school
- Objectives of co-curricular activities
- Principles underlying the organisation of co-curricular activities
- Types of co-curricular activities
- Management of co-curricular activities

Unit V: Management of resources

12 Hours

- Concept and scope of school management
- Management of :
 - (a) Human resources
 - (b) Material resources
- Classroom management

Unit VI : Research and experimentation

15 Hours

- Meaning, scope and importance of action research
- Identification of problems in school and classroom
- Solving a specific problem through action research
- Trying out various innovative practices

Unit VII : Instructional technology

15 Hours

- Concept of instructional technology
- General principles and maxims of teaching
- Distinction between methods, models, strategies of teaching
- Inquiry training model
- Learner centred approach
- Overview of software and hardware
- Meaning, scope and importance of media in teaching
- Criteria for selection of an appropriate media
- Improvising teaching learning material

Unit VIII : Evaluation

15 Hours

- Concept, scope and significance of evaluation in educational process
- Critical appraisal of existing evaluation system, continuous and comprehensive evaluation
- Process and product evaluation
- Oral, written and performance evaluation
- Construction of a criterion reference teacher made achievement test

Unit IX : Professional ethics

5 Hours

- Concept of professional ethics
- Dimensions of ethics
- Knowledge about state education code
- General attitudes acceptable to society
- Work ethics.

हिन्दी शिक्षण

हिन्दी शिक्षण की प्रस्तावित पाठ्यचर्या तथा उसके निर्माण संबंधी मार्गदर्शक निर्देश

पाठ्यचर्या में हिन्दी भाषा का स्थान अत्यन्त महत्त्वपूर्ण है। हिन्दी भाषी राज्यों में माध्यमिक विद्यालयों में पढ़ाये जाने वाले दूसरे विषयों की तरह वह केवल एक विषय ही नहीं अपितु अन्य विषयों के ज्ञानार्जन का सहज एवं स्वाभाविक माध्यम भी है। बालक के ज्ञानात्मक, भावात्मक और कौशलात्मक विकास में भी इसका महत्त्वपूर्ण योगदान है। विद्यालयी कार्यक्रमों में हिन्दी की इस बहु-आयामी भूमिका को देखते हुए यह अनिवार्य है कि माध्यमिक शिक्षक प्रशिक्षण कार्यक्रम में हिन्दी-शिक्षण की पाठ्यचर्या बनाते समय विशेष सावधानी बरती जाए।

वर्तमान स्थिति में स्नातक की डिग्री प्राप्त करने के पश्चात् विद्यार्थी माध्यमिक शिक्षक प्रशिक्षण संस्थानों में प्रवेश ले सकते हैं। यहां अनेक विद्यार्थी ऐसे होते हैं या हो सकते हैं जिनका हिन्दी भाषा एवं साहित्य का ज्ञान माध्यमिक स्तर (कक्षा 10 तक) के

शिक्षक के लिए पर्याप्त न हो। इसलिए अनिवार्य है कि इस स्तर पर हिन्दी शिक्षण-प्रशिक्षण कार्यक्रम में शिक्षण विधियों की जानकारी के साथ हिन्दी भाषा एवं साहित्य संबंधी ज्ञान के समुन्नयन को भी पर्याप्त स्थान दिया जाए ताकि भावी अध्यापकों में हिन्दी-शिक्षण संबंधी उन सभी कुशलताओं तथा क्षमताओं को विकसित किया जा सके जो उन्हें शिक्षण तथा सह-शिक्षण कार्यों को सफलता पूर्वक संपन्न करने में सहायक सिद्ध हों।

1.1 हिन्दी शिक्षण- प्रशिक्षण के उद्देश्य

माध्यमिक स्तर पर हिन्दी शिक्षण-प्रशिक्षण के निम्नलिखित उद्देश्य निर्धारित किए जाते हैं :

(क) ज्ञानपरक

1. हिन्दी भाषा के महत्त्व तथा उसके शिक्षण के उद्देश्यों से अवगत कराना।

2. अद्यतन देवनागरी लिपि और हिन्दी वर्तनी के मानक रूप से अवगत कराना तथा उनकी त्रुटियों से संबंधित समस्याओं एवं समाधान के उपायों की जानकारी देना।
3. हिन्दी-शिक्षण के स्तर को समुन्नत करने की दृष्टि से छात्राध्यापकों की भाषिक तथा साहित्यिक योग्यताओं को विकसित करना।
4. हिन्दी-शिक्षण के लक्ष्यों की सम्प्राप्ति के लिए प्रभावी साधनों, विधियों एवं उद्देश्य मूलक उपागमों से अवगत कराना।
5. कक्षा नौ एवं दस की हिन्दी पाठ्यचर्या तथा पाठों का विश्लेषण करना सिखाना और तदनुसृत शिक्षण विन्दुओं के चयन की योग्यता विकसित करना।
6. हिन्दी साहित्य की अधुनातन प्रवृत्तियों से अवगत कराना।

(ख) कौशलपरक

1. भावों एवं विचारों को सुनकर या पढ़कर ग्रहण करने की योग्यता विकसित करना।
2. भावों एवं विचारों को मौखिक तथा लिखित रूप में शुद्ध एवं प्रभावशाली ढंग से व्यक्त करने की योग्यता विकसित करना।
3. हिन्दी के प्रभावी शिक्षण के लिए भाषा कौशलों एवं विभिन्न साहित्यिक विधाओं की शिक्षण विधियों एवं तकनीकों के प्रयोग की क्षमता विकसित करना।
4. भाषा-शिक्षण से संबद्ध सह-शैक्षणिक क्रियाओं

- के आयोजन की क्षमता विकसित करना।
5. भाषा शिक्षण के लिए अल्पव्ययी श्रव्य-दृश्य शैक्षणिक उपकरणों का निर्माण करने और जन संचार माध्यमों तथा आधुनिक शैक्षणिक उपकरणों का अपने शिक्षण में प्रयोग करने की योग्यता विकसित करना।
6. सतत एवं व्यापक मूल्यांकन करने की कुशलता विकसित करना।

(ग) भावपरक

1. अनुभूत्यात्मक योग्यता का विकास करना।
2. सौन्दर्य बोध तथा चिन्तन की योग्यता का विकास करना।
3. सृजनात्मक योग्यता का विकास करना।
4. राष्ट्रीय शिक्षाक्रम में वर्णित दस केन्द्रिक तत्त्वों से संबंधित मूल्यों एवं सद्वृत्तियों के प्रति चेतना विकसित करना।
5. स्वाध्याय के प्रति रूचि विकसित करना।

1.2 पाठ्यचर्या निर्माण के मार्गदर्शक निर्देश

माध्यमिक स्तर पर भाषा-शिक्षण की आवश्यकताओं तथा उद्देश्यों को दृष्टि में रखते हुए हिन्दी के भावी शिक्षक के लिए निम्नांकित योग्यताएं अपेक्षित हैं :

1. भाषिक, 2. साहित्यिक, 3. शिक्षण-विधि संबंधी, तथा 4. मूल्यांकन-संबंधी।

इन योग्यताओं के आधार पर वह —

- (क) छात्रों की भाषा- आवश्यकताओं को पहचान

कर उनसे संबंधित भाषा कौशलों का विकास कर सकेगा।

- (ख) विविध साहित्यिक विधाओं की विशेषताओं, उनके स्वरूपगत एवं शैलीगत भेद संबंधी जानकारी के आधार पर छात्रों की साहित्यिक योग्यताओं की विकसित कर सकेगा।
- (ग) प्रभावपूर्ण कक्षा-शिक्षण के लिए उचित शिक्षण-विधियों एवं तकनीकों का अनुसरण कर सकेगा।
- (घ) छात्रों की भाषा संबंधी त्रुटियों का निदान व उपचार कर सकेगा तथा अपनी शिक्षण पद्धति में यथोचित संशोधन कर सकेगा।

इन अपेक्षित योग्यताओं को दृष्टि में रखते हुए हिन्दी शिक्षण-प्रशिक्षण की पाठ्यचर्या निर्माण के निम्नलिखित मार्गदर्शक निर्देश निर्धारित किए गए हैं:

1. हिन्दी-शिक्षण-प्रशिक्षण पाठ्यचर्या के मुख्यतः दो घटकों-विषयवस्तु एवं शिक्षण विधि का संयोजन समन्वित रूप से किया जाए। उन्हें पृथक-पृथक न समझा जाए। इन दोनों घटकों से संबंधित प्रायोगिक कार्यों को पाठ्यचर्या में यथोचित स्थान दिया जाए।
2. अध्यापक शिक्षा पाठ्यक्रम-एक रूपरेखा (1988) में भाषा (हिन्दी) शिक्षण के लिए 20% (120 घंटे) का समय निर्धारित किया गया है। अतः उसकी पाठ्यचर्या का निर्माण समय की सीमा को दृष्टि में रखकर किया जाना उचित होगा।

3. शिक्षण-स्तर को समुन्नत करने की दृष्टि से छात्राध्यापकों के भाषिक एवं साहित्यिक ज्ञान-विस्तार के लिए अभ्यास कार्यों का आयोजन वर्ष भर निम्नलिखित ढंग से किया जाए :

(क) कक्षा दस तक की अपेक्षित भाषा योग्यताओं को दृष्टि में रखते हुए भाषा के तीनों पक्षों-ज्ञानात्मक, कौशलात्मक और भावात्मक- के विकास पर ध्यान देना अपेक्षित है। इसके लिए आवश्यक है कि भाषिक तत्त्वों का ज्ञान तथा भाषिक कौशलों की शिक्षण विधियों की जानकारी दिए जाने की व्यवस्था पाठ्यचर्या में रहे। इनसे संबंधित प्रायोगिक कार्यों का चयन करते समय भावात्मक पक्ष पर भी बल रहे।

(ख) साहित्य संबंधी योग्यताओं के समुन्नयन के लिए छात्राध्यापकों को कक्षा नौ और दस की हिन्दी की पाठ्य पुस्तकों, पूरक एवं अतिरिक्त पुस्तकों में दिए गए पाठों से संबंधित पौराणिक, ऐतिहासिक, वैज्ञानिक एवं सांस्कृतिक संदर्भों की विस्तृत जानकारी दी जाए। विभिन्न विधाओं के पाठों में वर्णित मार्मिक स्थलों एवं प्रसंगों की पहचान तथा सौन्दर्य बोध कराने और उनसे संबंधित अभ्यास कार्य कराने की व्यवस्था भी पाठ्यचर्या में होनी चाहिए।

4. राष्ट्रीय शिक्षाक्रम में दस केन्द्रिक तत्वों का वर्णन है यथा-भारतीय स्वतंत्रता आन्दोलन का इतिहास, संवैधानिक दायित्व, राष्ट्रीय एकता के पोषक तत्व, भारत की साझी सांस्कृतिक धरोहर, लोकतंत्र, समाजवाद एवं धर्म निरपेक्षता, स्त्री-पुरुष समानता, पर्यावरण संरक्षण, सामाजिक बाधाओं का निवारण, लघु परिवार की मान्यता का निर्वाह और वैज्ञानिक दृष्टि का विकास। इन तत्वों से संबंधित जीवन मूल्यों तथा सदवृत्तियों को छात्राध्यापकों में विकसित करने के लिए विविध कार्यकलापों का उल्लेख पाठ्यचर्या में रहे।
5. हिन्दी-शिक्षण में जन संचार माध्यमों जैसे-समाचार पत्र, रेडियो, दूरदर्शन आदि के उपयोग तथा उनके द्वारा किए गए प्रयासों की जानकारी देना अपेक्षित है। अल्पव्ययी श्रव्य-दृश्य उपकरणों के निर्माण को भी उचित स्थान दिया जाए। इसके अतिरिक्त शैक्षिक प्रौद्योगिकी और भाषा संबंधी उपयोगी उपकरणों की प्रयोग-विधि की चर्चा भी पाठ्यचर्या में रहे।
6. स्थानीय बोली मानक भाषा को प्रभावित करती है। आवश्यकतानुसार उच्चारण, वर्तनी, वाक्य-रचना आदि संबंधी प्रभाव की जानकारी दिए जाने की व्यवस्था पाठ्यचर्या में रहे।
7. समय की दृष्टि से यह प्रस्तावित किया जाता है कि भाषिक एवं साहित्यिक ज्ञान-समुन्नयन

को एक तिहाई और शिक्षण-विधि को दो तिहाई स्थान देने की व्यवस्था पाठ्यचर्या में रखी जाए। स्थिति एवं आवश्यकतानुसार अध्यापक प्रशिक्षक उस व्यवस्था में परिवर्तन कर सकते हैं।

8. भाषा संप्राप्ति का मूल्यांकन सतत एवं व्यापक हो। इसके लिए आंतरिक एवं वाह्य मूल्यांकन की व्यवस्था लगभग क्रमशः 40% तथा 60% के अनुपात में रहे। शिक्षण-विधि के सैद्धान्तिक पक्ष का मूल्यांकन वाह्य हो। भाषिक एवं साहित्यिक ज्ञान-समुन्नयन तथा उसके अभ्यास कार्यों एवं शिक्षण-विधि संबंधी प्रायोगिक कार्यों का मूल्यांकन आंतरिक रखना ही अपेक्षित होगा।

1.3 पाठ्यचर्या क्रियान्वयन के लिए मार्गदर्शक निर्देश

पाठ्यचर्या क्रियान्वित करने की दृष्टि से अध्यापक-प्रशिक्षकों के लिए कुछ निर्देश निर्धारित किए गए हैं जो निम्नलिखित हैं :

1. सत्रारंभ में प्रत्येक छात्राध्यापक की भाषा योग्यता का निदानात्मक परीक्षण अनिवार्य होना चाहिए। इसके पश्चात व्यक्तिगत स्तर पर तथा अनेक छात्रों की एक ही प्रकार की भाषा-ज्ञान संबंधी कमजोरी के आधार पर सामूहिक रूप में उपचारात्मक शिक्षण के उपायों को अपनाना श्रेयस्कर होगा। उपचारात्मक शिक्षण एवं अभ्यासात्मक कार्य आवश्यकतानुसार सतत प्रक्रिया के रूप में

- अपनाए जाएं।
2. छात्राध्यापकों की विभिन्न भाषिक एवं साहित्यिक योग्यताओं के समुन्नयन के लिए उनसे संबंधित विविध प्रकार के अभ्यास कार्य विभिन्न सत्रों में करवाए जाएँ। जैसे भाषिक योग्यता के विकास के लिए उच्चारण, वर्तनी, शब्द-निर्माण, शब्द-भंडार वृद्धि, वाक्य-रचना, अनुच्छेद-रचना आदि संबंधी अभ्यास। साहित्यिक योग्यताओं के समुन्नयन के लिए विभिन्न साहित्यिक विधाओं के पाठों को आलोचनात्मक दृष्टि से पढ़कर विश्लेषण करना, महत्वपूर्ण अंशों की समझना और सौन्दर्य बोध करना तथा पाठों को पढ़ाते समय दस केन्द्रिक तत्वों को ध्यान में रखते हुए उनसे संबंधित जीवन-मूल्यों को विकसित करना।
 3. छात्राध्यापकों को इस बात से परिचित कराना कि हिन्दी भाषा सीखते-सिखाते समय हमें बालक के परिवेश की बोली को भी ध्यान में रखना चाहिए क्योंकि वह उसके मानक रूप को प्रभावित करती रहती है। उन्हें कक्षा में अधिकाधिक मानक भाषा का प्रयोग करने को प्रोत्साहित करना चाहिए।
 4. छात्राध्यापकों को अतिरिक्त पठन के लिए प्रोत्साहित किया जाए ताकि उनके भाषा एवं साहित्य के ज्ञान का विस्तार हो सके।
 5. अध्यापक-प्रशिक्षकों की स्वयं भी पढ़ाते समय विभिन्न शिक्षण विधियों एवं तकनीकों का अनुसरण करना चाहिए ताकि उनके

छात्राध्यापक आगे चलकर उन्हें अपने शिक्षण कार्य में प्रयोग में ला सकें। यथा-भाषण, वाद-विवाद, चर्चा-परिचर्चा, संगोष्ठी, स्वाध्याय, विस्तार भाषण-माला, पुस्तकालय संदर्भ, परियोजना, सामूहिक कार्य, तुलना, प्रयोग आदि।

6. छात्राध्यापकों के मूल्यांकन के लिए अध्यापक प्रशिक्षकों को भी सतत एवं व्यापक मूल्यांकन प्रक्रिया को अपनाना चाहिए।

1.4 हिन्दी शिक्षण-प्रशिक्षण पाठ्यचर्या

समय-120 घंटे

भाग-क : भाषिक एवं साहित्यिक ज्ञान-समुन्नयन (26 घंटे सैद्धांतिक पक्ष)

इकाई-1 हिन्दी की ध्वनि-व्यवस्था

स्वर, संध्यक्षर स्वर, अनुनासिक स्वर, मात्राएँ, व्यंजन, संयुक्त व्यंजन, हिन्दी ध्वनि व्यवस्था की विशेषता, उच्चारण की दृष्टि से हिन्दी ध्वनियों का वर्गीकरण, स्थान, प्रयत्न तथा वाह्य प्रयत्न की दृष्टि से स्पर्श व्यंजनों के भेद, उच्चारण की शुद्धता, उच्चारण के तत्व-विवृति, बल, सुर, गति और अनुतान।

इकाई-2 हिन्दी वर्तनी

मानक देवनागरी लिपि का स्वरूप एवं विशेषताएँ,

वर्तनी के नियम एवं समस्यायें।

इकाई-3 हिन्दी शब्द-भंडार

आधारभूत शब्दावली, शब्दों के प्रकार-तत्सम, तद्भव एवं विदेशी, शब्दों के आर्थी संबंध-समानार्थी, विपरीतार्थी, अनेकार्थी, मिलती-जुलती ध्वनियों वाले शब्द, शब्द में अर्थ परिवर्तन, शब्द का रूप विकार, शब्द रचना (उपसर्ग, प्रत्यय, संधि, समास द्वारा), युग्म शब्द तथा उनका वाक्यों में प्रयोग, शब्दों के व्याकरणिक रूप।

इकाई-4 वाक्य-संरचना

वाक्य गठन, उद्देश्य, विधेय, उद्देश्य-विस्तार, विधेय-विस्तार, वाक्य में पदक्रम, उनका परस्पर संबंध और अन्वय, रचना की दृष्टि से वाक्यों के प्रकार, अर्थ और भावद्योतन की दृष्टि से वाक्य के प्रकार, वाक्य-विश्लेषण, वाक्य-संश्लेषण, वाक्य रचना संबंधी दोष तथा निराकरण के उपाय, विराम चिह्नों का प्रयोग।

इकाई-5 हिन्दी साहित्य का सामान्य परिचय

कक्षा नौ एवं दस की पाठ्य पुस्तकों में समाविष्ट विभिन्न कालों के प्रतिनिधि साहित्यकारों और उनकी रचनाओं के संदर्भ में हिन्दी साहित्य की सामान्य प्रवृत्तियों का संक्षिप्त परिचय।

इकाई-6 साहित्यिक विधाओं का परिचय

हिन्दी साहित्य की विभिन्न विधाओं यथा-कविता, कहानी, नाटक, उपन्यास, निबंध, जीवनी, आत्मकथा, रेखाचित्र, संस्मरण, डायरी आदि के स्वरूपगत और शैलीगत भेद, अधुनातन रूप और प्रवृत्तियाँ।

इकाई-7 काव्य के स्वरूप तथा सौन्दर्य तत्व

काव्य का स्वरूप-महाकाव्य, प्रबन्ध काव्य, खंड काव्य, मुक्तक काव्य आदि, काव्य के सौन्दर्य तत्व-नाद सौन्दर्य, भाव सौन्दर्य, विचार सौन्दर्य, छंद, अलंकार, रस, शब्द-शक्ति तथा गुण का परिचय।

इकाई-8 हिन्दी शिक्षण-उन्नयन से संबंधित संस्थाएं-परिचय एवं कार्य

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद, केन्द्रीय हिन्दी निदेशालय, केन्द्रीय हिन्दी संस्थान, भारतीय भाषा संस्थान तथा दक्षिण हिन्दी प्रचार सभा द्वारा किए जाने वाले कार्य।

इकाई-9 हिन्दी की पाठ्यचर्या तथा पाठ्य पुस्तकें

कक्षा नौ एवं दस की हिन्दी पाठ्यचर्या का अध्ययन तथा पाठ्य पुस्तकों में से विभिन्न साहित्यिक विधाओं के कुछ पाठों का विश्लेषणात्मक अध्ययन।

भाग (ख) शिक्षण-विधि (60 घंटे सैद्धांतिक पक्ष)

इकाई-1 हिन्दी भाषा का सामान्य परिचय तथा शिक्षण के उद्देश्य

हिन्दी भाषा का उद्भव और विकास, संपर्क भाषा और राजभाषा के रूप में हिन्दी, संविधान स्वीकृत भारतीय भाषाओं में हिन्दी का स्थान, हिन्दी क्षेत्र की बोलियाँ तथा मानक भाषा हिन्दी, विद्यालयी पाठ्यक्रम में हिन्दी का स्थान, महत्व, शिक्षण के उद्देश्य तथा तत्संबंधी व्यवहार परिवर्तन।

इकाई-2 भाषा शिक्षण के सामान्य सिद्धान्त

भाषा सीखने की स्वाभाविक शक्ति, भाषा सीखने की अध्ययनात्मक शक्ति, भाषा सीखने में प्रयोग और अभ्यास का महत्व, शिक्षक का आदर्श एवं भूमिका, भाषा के विभिन्न अंगों का सापेक्षिक समन्वय, शिक्षण-बिन्दुओं का क्रमायोजन, रोचकता, विभिन्न शिक्षण-सूत्रों का प्रयोग।

इकाई-3 उच्चारण-शिक्षण

उच्चारण-शिक्षण का महत्व, उच्चारण संबंधी सामान्य दोष, कारण तथा निराकरण के उपाय, माध्यमिक स्तर पर उच्चारण-शिक्षण के अवसर (व्याकरण- शिक्षण, मौखिक रचना-शिक्षण एवं सस्वर वाचन के समय) एवं शिक्षण प्रक्रिया।

इकाई-4 पठन-शिक्षण

पठन कौशल से तात्पर्य, पठन-शिक्षण का महत्व, उद्देश्य, पठन के प्रकार-सस्वर वाचन और मौन पठन, प्रभावी सस्वर वाचन की विशेषताएं-शुद्ध तथा स्पष्ट उच्चारण, उचित अनुतान और बलाघात, गति, प्रवाह, यति, भावानुरूपता, अर्थान्वितियों की दृष्टि से शब्द समूहों का वाचन आदि। मौन पठन का महत्व, मौन पठन दक्षता-अर्थ ग्रहण एवं तीव्र गति, मौन पठन के प्रकार, मौन पठन को सौद्देश्य बनाना, पठन-संप्राप्ति का मूल्यांकन, पठन-दोष, कारण एवं उपाय।

(ख) पठन-शिक्षण और पाठ्य पुस्तक, पठन रूचि का विस्तार, अतिरिक्त पठन सामग्री का चयन।

इकाई-5 वर्तनी शिक्षण

वर्तनी शिक्षण का महत्व, वर्तनी संबंधी अशुद्धियों की पहचान, कारण, वर्गीकरण एवं निराकरण के उपाय, माध्यमिक स्तर पर वर्तनी शिक्षण के अवसर (व्याकरण- शिक्षण एवं लिखित रचना- शिक्षण के अंतर्गत) एवं शिक्षण प्रक्रिया।

इकाई-6 रचना-शिक्षण

(क) मौखिक रचना-शिक्षण

मौखिक रचना का महत्व एवं उद्देश्य, मौखिक रचना

की विशेषताएँ—आत्मविश्वास के साथ बोलना, शुद्धउच्चारण, शुद्ध, स्वाभाविक एवं स्पष्ट भाषा, कथन की प्रभविष्णुता, विषयानुरूप भाषा, शिष्टजनोचित भाषा, मधुरिमा, मर्मस्पर्शिता तथा मौलिकता, मौखिक रचना के प्रकार-वार्तालाप, वर्णन, भाषण, कहानी कहना, संवाद, वाद-विवाद प्रतियोगिता, परिसंवाद, समाचार दर्शन आदि। मौखिक रचना-शिक्षण में ध्यान देने योग्य बातें, मौखिक रचना का संशोधन, पाठ योजना।

(ख) लिखित रचना-शिक्षण

लिखित रचना-शिक्षण का महत्त्व, उद्देश्य, लिखित रचना के अंग—(1) यांत्रिक पक्ष—सुलेख, वर्तनी आदि (2) भाषिक पक्ष—शब्द तथा वाक्य प्रयोग की शुद्धता (3) भाव और विचार पक्ष—तथ्यों, भावों, एवं विचारों का संयोजन, क्रमबद्धता, सुसंबद्धता तथा अनुच्छेदीकरण, लिखित रचना के रूप—(1) स्वतंत्र रचना—निबंध, कहानी, कविता, जीवनी, संस्मरण आदि (2) निर्देशित रचना—पत्र, संक्षेपण, पल्लवन, सारांश, रिपोर्टाज, टिप्पणी, पुस्तक समीक्षा आदि। लिखित रचना के स्तर—प्रतिस्मरणात्मक, रचनात्मक एवं सृजनात्मक, रचना-शिक्षण विधि, पाठ विकास के सोपान और पाठ योजना निर्माण, लिखित कार्य का मूल्यांकन, अध्यापकीय निर्देश एवं सहयोग।

इकाई—7 कविता-शिक्षण

कविता-शिक्षण के उद्देश्य, विधियाँ, शिक्षण सोपान

तथा पाठ योजना निर्माण।

इकाई—8 निबंध-शिक्षण

निबंध-शिक्षण का महत्त्व और उद्देश्य, पठन-शिक्षण की दृष्टि से निबंधों के प्रकार (वर्णनात्मक, भावनात्मक, विचारात्मक आदि) और उनके शिक्षण में अंतर, निबंध-शिक्षण में मौन पठन का महत्त्व, अर्थग्रहण और भाषा कार्य, पाठ-विश्लेषण, शिक्षण बिन्दुओं का चयन, पाठ-विकास के सोपान और पाठ-योजना निर्माण।

इकाई—9 कहानी-शिक्षण

कहानी-शिक्षण का महत्त्व और उद्देश्य, हिन्दी कहानी के प्रमुख रूपों और शैलियों का परिचय (यथा घटना प्रधान, चरित्र प्रधान आदि), कहानी-शिक्षण की विधि, शिक्षण सोपान और पाठ-योजना निर्माण।

इकाई—10 नाटक-शिक्षण

नाटक-शिक्षण का महत्त्व और उद्देश्य, शिक्षण विधियाँ, शिक्षण-सोपान और पाठ-योजना निर्माण।

इकाई—11 अन्य साहित्यिक विधाओं का शिक्षण

जीवनी, आत्मकथा, संस्मरण, रेखाचित्र आदि विधाओं की शिक्षण विधियाँ, सोपान और पाठ-योजनाएँ।

इकाई-12 व्याकरण-शिक्षण

हिन्दी-शिक्षण में व्याकरण-शिक्षण का स्थान, महत्व और उपयोगिता, व्याकरण-शिक्षण के उद्देश्य, शिक्षण-विधियाँ, व्यावहारिक व्याकरण, शिक्षण-सोपान तथा पाठ-योजना।

इकाई-13 इकाई योजना

महत्व, इकाई रचना के सिद्धान्त तथा इकाई पाठ-योजना।

इकाई-14 हिन्दी-शिक्षण में शैक्षणिक उपकरण तथा साधन

शैक्षणिक उपकरणों का महत्व और उपयोगिता, उपकरणों के विविध रूप-अल्पव्ययी सामान्य उपकरण और यांत्रिक दृश्य-श्रव्य उपकरण, उपकरणों का प्रसंगानुकूल प्रयोग, जन संचार के माध्यम।

इकाई-15 मूल्यांकन

हिन्दी-शिक्षण में मूल्यांकन का महत्व, उसकी आधुनिक संकल्पना, परीक्षा और मूल्यांकन में अंतर, उद्देश्यमूलक परीक्षण युक्तियाँ, मूल्यांकन की विधियाँ, संप्राप्ति परीक्षण और निदानात्मक परीक्षण, प्रश्नों के प्रकार-निबंधात्मक, लघु उत्तरात्मक तथा वस्तुनिष्ठ प्रश्न, और रचना-प्रक्रिया।

इकाई-16 हिन्दी-शिक्षण में क्रियात्मक शोध

सामान्य परिचय, महत्व, क्षेत्र तथा रूपरेखा बनाने की विधि।

प्रायोगिक कार्य (34 घंटे)

(क) भाषिक एवं साहित्यिक ज्ञान-समुन्नयन संबंधी (14 घंटे)

1. उच्चारण संबंधी सामान्य अशुद्धियों की सूची बनाना एवं उनकी पहचान के लिए उच्चारण अभ्यास करना।
2. लिपि एवं वर्तनी की समस्या का अध्ययन करना, दोषों को पहचान कर उनके निराकरण के लिए विभिन्न प्रकार के शब्दों का संकलन तथा प्रयोग करना।
3. शब्द-भंडार वृद्धि के लिए कक्षा नौ और दस की पाठ्यपुस्तकों व पूरक पुस्तकों में प्रयुक्त कुछ पर्यायवाची, विलोम, समरूपी और भिन्नार्थक शब्दों तथा उपयुक्त मुहावरों एवं लोकोक्तियों का संकलन कर यथास्थान प्रयोग करना, उपसर्ग, प्रत्यय, संधि, समास आदि के आधार पर शब्द सूची बनाना।
4. कक्षा नौ और दस की पाठ्यपुस्तकों के आधार पर वाक्य रचना संबंधी अभ्यास कार्य जैसे-पुरुष, लिंग, वचन और कारक की अन्विति, वाक्य रूपांतरण और वाक्य विश्लेषण करना।

5. कक्षा नौ और दस की पाठ्यपुस्तकों में समाविष्ट सांस्कृतिक, पौराणिक, वैज्ञानिक, साहित्यिक एवं ऐतिहासिक तथ्यों एवं संदर्भों की सूची सामूहिक कार्य के रूप में तैयार करना तथा उनसे संबंधित विस्तृत जानकारी विभिन्न संदर्भ ग्रन्थों (जैसे शब्द कोश, साहित्य कोश आदि) तथा पूरक पुस्तकों से संकलित करना।
6. निर्धारित पाठ्यपुस्तकों में दिए गए साहित्यकारों का परिचय तथा उनसे संबंधित अध्यापन सामग्री जैसे— चार्ट, एलबम, भित्ति पत्रिका आदि बनाना।
7. हिन्दी भाषा में प्रकाशित होने वाली पत्र-पत्रिकाएं पढ़ना तथा उनमें से उपयोगी सामग्री का चयन कर यथास्थान प्रयोग करना। पढ़ी हुई सामग्री पर कक्षा में चर्चा करना।
8. किशोरोपयोगी साहित्य तथा अतिरिक्त पुस्तकें पढ़कर उनमें से महापुरुषों के कथनों, देश प्रेम के गीतों, नीति संबंधी कहानियों, उत्तम पंक्तियों और अंतः कथाओं का संकलन कर एलबम बनाना तथा शिक्षण के समय उनका प्रसंगानुसार प्रयोग करना।
9. पाठ्यपुस्तकों में वर्णित कविताओं एवं कहानियों से मिलती-जुलती अन्य कविताएं व कहानियाँ संकलित करना।
10. निर्धारित पाठ्यपुस्तकों में से विभिन्न विधाओं के पाठों का विश्लेषणात्मक अध्ययन करना।
11. राष्ट्रीय मूल्यों तथा केन्द्रिक पाठ्यचर्या के

प्रमुख तत्वों को ध्यान में रखकर कहानियों व कविताओं का संकलन तैयार करना।

(ब) शिक्षण-विधि संबंधी

(20 घंटे)

1. विभिन्न भाषा कौशलों तथा साहित्यिक विधाओं की पाठ योजनाएं बनाना।
2. भाषा कौशलों तथा साहित्यिक विधाओं के शिक्षण से संबंधित उपयुक्त श्रव्य-दृश्य उपकरणों का संकलन तथा निर्माण करना।
3. मौखिक एवं लिखित अभिव्यक्ति संबंधी सामान्य दोषों की सूची बनाना तथा उपचारात्मक अभ्यासों की रचना करना।
4. कक्षा नौ/दस के लिए एक घंटे की अवधि का आदर्श प्रश्न पत्र बनाना।
5. किसी एक कौशल/एक विधा से संबंधित नैदानिक परीक्षण पत्र एवं उपचारात्मक अभ्यास की रचना करना।
6. हिन्दी शिक्षण से संबंधित सह-शैक्षणिक कार्यकलापों का आयोजन करना जैसे—सामूहिक गान, नाटकीय कार्यकलाप, अभिनय पूर्ण गीत, कहानी, अंत्याक्षरी तथा वाद-विवाद प्रतियोगिता का आयोजन आदि।
7. हिन्दी शिक्षण से संबद्ध एक परियोजना/क्रियात्मक शोध की रूपरेखा तैयार करना।

1.5 मूल्यांकन-पद्धति

भाषिक एवं साहित्यिक ज्ञान—समुन्नयन तथा

शिक्षण-विधि के आंतरिक एवं वाह्य मूल्यांकन के लिए अंक व्यवस्था प्रतिशत के रूप में निम्नलिखित ढंग से प्रस्तावित की जाती है:

आंतरिक मूल्यांकन : 40%

- (क) भाषिक एवं साहित्यिक ज्ञान-समुन्नयन संबंधी लिखित परीक्षा – 20%
- (ख) भाषिक एवं साहित्यिक ज्ञान संबंधी प्रायोगिक कार्य – 10%
- (ग) शिक्षण-विधि संबंधी प्रायोगिक कार्य – 10%

वाह्य मूल्यांकन : 60%

शिक्षण-विधि पर आधारित लिखित परीक्षा -60%

आंतरिक मूल्यांकन में आवधिक परीक्षा, कक्षा कार्य, गृह कार्य, प्रायोगिक/अभ्यास कार्य आदि के प्राप्तांकों को सम्मिलित किया जा सकता है।

विशेष :- माध्यमिक स्तर शिक्षा प्राप्ति की दृष्टि से अत्यंत महत्वपूर्ण है। इस स्तर के अध्यापक योग्य तथा पूर्णतया प्रशिक्षित होने चाहिए। इन दो बातों को ध्यान में रखकर पाठ्यचर्या का निर्माण किया गया है। पर ऐसा लगता है कि 120 घंटे की सीमा को देखते हुए यह कुछ भारी हो गया है। आप अपनी स्थिति के अनुसार इसका उपयोग कर सकते हैं।

Teaching of English Language

NATIONAL Policy on Education,(NPE) 1986, has provided new directions for changes in the school curriculum which are outlined in the National Curriculum for Elementary and Secondary Education (NCERT, 1988). The new directions emphasized once more the child centred approach, interactive styles of learning and suggested minimum levels of learning at different stages of school education. The NCTE document has also emphasized the need for rethinking on preservice training of teachers and outlined a course content of the training programme and suggested new strategies for teacher education. There can be no doubt about the fact that the teacher is a crucial factor in the teaching learning process. The training curriculum must help the teacher to create a desirable classroom climate, to plan a variety of learning activities, to produce and use learning materials effectively and to try to identify with the needs and aspirations of students. In the process of modernisation of preservice and inservice teacher education, the teaching of languages and especially of English as a second language, must be considered an important factor. In spite of all our attempts

at improvement at the national and state levels, there is a great deal that is wrong with the teaching of English and our students who after years of being taught the English language, are not able to understand, speak, read or write English which can be termed as standard, i.e. acceptable to other speakers of English as a second language. The need for rethinking on the training programme has two major causes as mentioned above, viz. the new directions in education and the near failure in the teaching of English as a language, caused by the fact that it is taught as a content course rather than a skill course.

Objectives of the proposed course can be stated as follows:

Objectives

1. It should improve the teacher's own mastery of the basic skills in English and of the teaching techniques of English as a second language. The weightage and time may be in proportion to skills training, i.e. what to

teach and how to teach, should get more time than description of methods.

2. While the teacher needs to master English language so that it can be used as tool both for communication and further learning but not to learn about the language at this stage.
3. The teacher must be given a sound applied course in English phonology, grammar, vocabulary, meaning systems so that he can use them and teach lexical (vocabulary) items which pose problems to his pupil.
4. He must learn methods and techniques of teaching English as a second language which are both up to date and effective.
5. He should be able to apply the basic principles of related disciplines such as linguistics, psychology, sociology which he is learning in his foundation course and connect them to ESL (English as second language) procedures.
6. He should both experience and understand the dynamics of group work.
7. Part of his training should give him the techniques of evaluating his own teaching as well as the pupil's learning.
8. Above all, he must learn how to create a warm, accepting classroom environment conducive to learning and to ego enhancement.
9. The teacher must understand the specific

objectives as outlined in the National School Curriculum for VI, VII and VIII and particularly problems that he may have to face.

Pre-service training alone will not ensure mastery of English and language teaching methods, therefore, regular inservice training must be planned for all teachers henceforth.

English Language Teaching in India

1. An analysis of English language teaching (ELT) in India shows that most of it takes place through the analysis of single sentences without considering in what contexts these sentences occur. This is artificial and has no consideration for psychological, social or interactive dimensions. In short, English language is not being taught in a meaningful fashion.
2. Textbooks prescribed in many states are structural, emphasizing selection and grading of grammatical and vocabulary items. However, whether the teacher uses this or grammar translation approach, there is greater emphasis on passive skills. Further, the teacher can only teach what he knows and as well as he knows.
3. The emphasis in the methodology of teaching English has been until recently on the 'teacher and teaching'. The learner and his needs have been ignored. Skills like oral comprehension, note-taking, reading and other study skills necessary for achieving the objective of using English as a library language have been sadly neglected.

4. There is very little, if any, self-directed learning in English. The student is, even today, very dependent on the teacher and can not undertake further study of the language on his own.
5. Communicative competence of students in the language is very poor. Most learners even after completion of a set standardised course, are unable to speak structurally well formed sentences or even understand the speech of others in a cultural or social context.
6. There is even today a vast deal of difference in spoken English as it is taught in different parts of India. This is so because in most cases, there is a great deal of interference of the mother tongue in the use of English. However, the teacher of English could also use the basic skills acquired in the mother tongue in a constructive manner.
7. Today learners are motivated to learn English for economic reasons rather than emotional or cultural reasons.
8. English language teaching does not facilitate or release the creativity of the learner in any sphere, i.e. literature, science or management where English is used as medium.

The situation is challenging and a positive approach in the right direction would certainly improve the scene of ELT. This beginning must be made in our teacher training colleges, if it is to filter down to the masses. A sense of commitment on the part of our teacher educators will certainly go a long way in facing the challenge of ELT in the country.

Specific Objectives

At the end of the training programme the student teacher should:

1. be able to comprehend the new role of English in universal primary education and learn English as a tool.
2. be committed, inspired and enthusiastic teacher of English as a second language.
3. have mastered the four — language skills of understanding, speaking, reading and writing and also the content of the prescribed textbooks and curriculum.
4. have tried out different models of teaching which were demonstrated to him during the training period.
5. have acquired facility, with intensive and extensive reading of modern textbooks, i.e. different kinds of writing (literary and others) which are usually prescribed for school children.
6. be able to teach with skill using interactional mode to evaluate himself and pupils to inculcate right language habits and to use controls so that wrong language habits are not formed.
7. be able to devise learning materials for teaching English as second language and remedy the errors which the pupils make.

Guidelines

The teacher educator must keep in mind that:

1. There should be no lectures about methods/ topics which are outlined below but brief presentations which are to be demonstrated in use by the teacher educators since the student teacher will imitate what the teacher educator does rather than do as he says. In short, the methods course must be an illustration of the theories recommended.
2. There is no artificial division between content enrichment and methods. The student teacher will go over the syllabus for 8, 9, 10, 11, 12th class with his teacher educator and while learning how to teach these points also improve his mastery of the English language.
3. All the learning about the English language will be implicit and not explicit for the pupils in school. Because we can not assume mastery of the basic structure of sounds, words, grammar and meaning in the student teacher, he too must be helped to develop a mental picture, an implicit structure of English with only necessary explicit teaching about English language.
4. The student teacher as well as the teacher educator must be able to use a simplified reference grammar which provides copious examples, if necessary, the experts committee may develop one such for Indian conditions.
5. The goal is to encourage communicative competence in our student teachers.

Implications for Teacher Educators

The orientation of teacher educators to new

directions in ESL may be organised on the following lines:

1. Greater insight into the working of English language.
2. Knowledge of more recent techniques which are relevant to Indian conditions.
3. Encouragement to seek expert help from RCEs, ELTs, SCERTs.
4. The ability to make purposeful use of media.
5. Acquaintance with professional literature and journals.

Curriculum Transaction

The teaching of English has been equated with the teaching of content in the prescribed textbooks, and therefore, the method of teaching used normally is explication of the content. With the structural syllabus, some emphasis is being given to introduction of graded sentence patterns and vocabulary items but there is more to the teaching of English. What the language teacher needs more than anything is comprehension of the dynamic strategies of the Speaker or Writer. In order to facilitate learning in their pupils, the teachers must also understand autonomous and self-directed learning schemes. Language learning must be linked with other cognitive and sensori-motor skills which the pupils are acquiring and with which they deal with the physical and social environment around them. There should be an integrated approach to curriculum transaction. The

student teacher must learn methods and techniques of teaching English as a second language which are both up to date and effective. He should be able to bridge his knowledge of language and methods with learning activities. He should both experience and understand the dynamics of group work. Part of his training should give him the techniques of evaluation. Above all, he must learn how to create a warm, receptive classroom environment conducive to learning and ego enhancement of the pupils.

Integrating ESL with Curriculum

What changes can be made in the ESL and training curriculum in order that the students and teachers could function better in their classrooms? The focus need not be on language *per se*, not even on communication, for these are means to an end. Language learning should promote cognitive development. But at present, students do not get trained in various forms of reasoning, such as, cause and effect leading to sequences of events, underlining the central meaning of an event, making comparisons, identifying relationships, recognizing problems and their solutions, drawing conclusions, anticipating events and consequences, defining alternative courses of actions, understanding feelings, experiences and reactions of others from their statements. To sum up, ESL curriculum is to be relevant to the purposes to which the rest of the education is developed. It is, therefore, important that ESL curriculum should focus on tasks which embody the kind of thinking that the student might be expected to engage in his non-language classes. This will lead the students to generalise linguistic and cognitive skills learnt in

language classroom to other non-language school settings. Such tasks would also prove intrinsically motivating. Only if student teachers are trained in this integrated manner, they will use the training in the classrooms.

Motivation and self Interest

Motivation is a complex drive. For our purpose here, we will oversimplify and equate motivation with self-interest. The ESL curriculum must be based on the learner's interests and creativity. As John Rassias puts it, in 'the Psychology of Language Learning', orientation must always be towards the student. The self is thus important. It is the genuine involving factor in study and psychologically we build on it. The student must always relate to what he is doing. Ideally, language study should be undertaken for the direct effect it has on the self. It is the route to maturity.

A great deal of what goes on under the name of second language teaching, does in fact conveniently ignore the lexical items which might interest the students. A blind insistence on the learner's acquisition of a core of basic sentence patterns often leads to educationally limited language programmes. It is necessary to remind the language teachers that while valid language skills may be the primary motive behind learning a second language; they should never allow themselves to subordinate to such immediate aims, the long-range objectives of fostering human values. The student teacher must be helped to develop his creativity and interests and the teacher educator must look beyond the usual classroom situation of pen, pencils and books. In practical terms, this will

involve permitting the learner to try out new roles in the second language, introducing cultural items characteristic of the societies to which the language belongs, undertaking appropriate digressions whenever interest is aroused, and relating the instruction to current events.

The language teacher must remember that long term aims may evoke the student's enthusiasm at the initial stage but can not sustain interest for the length of time required for reasonable proficiency. Therefore, each lesson should provide its own motivation. The students have verbal curiosity and an urge for socialization. These can be harnessed to ESL. Where communication is the method of ESL, the learning teaching is done among the students. All life is communication. We never read or write for ourselves alone. If the exercises are to be read out to each other, the students can choose a partner, sit together and hear each other, their own and other's spoken and written exercises. In this way, the social nature of language and language learning is used by the ESL teacher. Paired or group work in language classes involves imaginative anticipation of playroles in social groups. Each exercise must spring from the circumstances of their own lives. A learner's active participation yields better results than passive. The teacher becomes a facilitator, calls upon the child's resources and sets a creative pattern into which learner's energies flow. The teacher assists the learner to compile his word lists and compositions but does not set them and does not impose himself. Just as a bar magnet creates a certain physical condition in the field around it, and the magnetic field then acts upon the iron fillings; similarly, the teacher structures his

class but does not interfere with the learning process itself.

Syllabus outline for English Language Teaching

The teacher educator should ensure that:

- the overall approach is participatory and all learners participate in learning activities.
 - he plays the role of a planner, manager and facilitator of learning activities.
 - the student teacher develops his own basic language skills in listening, speaking, reading and writing.
 - the emphasis should be on meaningful communication and creative activities.
- (i) The distinctive feature of this syllabus is that it is learner oriented and it is aware of the needs of the student teacher. Until now the trainees may not have had the opportunity to master the basic skills of English in a learning environment. The trainee must be exposed to spoken and written English in such a manner that he/she may be motivated to use English and to look for opportunities to continue learning. To assist the student teacher in this self-learning, texts spoken (on tapes and video tapes) and written texts must be provided so that examples of contemporary usage and writing in English are studied.
- (ii) The progress of the trainees could be monitored through their performance in the

suggested activities and through assignments. Experiments in group and self-assessment with charts could be tried out. The testing could be more informal than formal, spread over the two years of training in a continuous fashion.

- (iii) This pattern of evaluation is to ensure active participation of the trainees in seminars, panel discussion, demonstrations, observation of demonstration lesson, viewing of films and listening to taped materials.
- (iv) The teacher educator will be effective in his training since the trainee will use the methods the teacher educator uses in the classroom.
- (v) The trainees do not need to learn about English language so much as to have before them a model of usage and opportunities to use the language. The teacher educator, therefore, should avoid lectures and monologues and use demonstrations, group work and activity-based approach.

Intensive Training in Language Skills

The trainees who undergo B.Ed. programme need more than curriculum transaction strategies. They need to improve their own mastery of the basic skills in English. The trainees need to master the English language so that it can be used for both communication and further learning. The trainee can give practice to his pupils in spoken language, grammar, vocabulary meaning and cultural con-

texts of communication when he has a sound knowledge of these systems. Therefore, it is necessary for each trainee to undergo an intensive training programme. This training programme will have the same number of hours as devoted to the pedagogical component and will keep a little ahead of it. The trainee will study each unit and then learn through observation as to how to teach it and then devise lesson plans and teaching learning materials before he teaches it in his practicum. Each unit is, in this way, gone over by each trainee four times.* This is one way to ensure that training is practice-oriented and leads to a pre-defined level of mastery.

The mastery of English language should have a textual base. Trainees must, above all, master all the texts prescribed for English at the school level (from class VI to class XII). More particular attention must be given to texts prescribed by the state for secondary classes. Further, the trainee may be exposed to contemporary and standard written English and different varieties of discourse. Such a variety of textual material is to be found in many anthologies. It must be kept in mind that these anthologies are for extensive reading by the trainee and at no time to be taught in the classroom or tested in the traditional manner. However, the trainees may be encouraged to study these in their own time and write or give oral reports of the four books they have read. The following are in the nature of suggestions for reading texts.

All text-books prescribed for study upto class XII should be intensively studied. For extensive study at least four of the following books may be studied:

* This is the same method of training as used in the Elementary Training Programme.

- (i) *Let's Enrich Our English* series by NCERT.
- (ii) *An Anthology of Short Stories* by contemporary writers in English.
- (iii) A collection of contemporary one-act plays or a full length play preferably contemporary.
- (iv) Abridged and simplified versions of classics of modern fiction.
- (v) Biographical writing or an interesting travelogue.

Care should be taken in selecting authors of literary standing whose writings will not present too many cultural problems. It may be worthwhile to include Indian writers like R.K. Narayan and Anita Desai. Similarly, contemporary writers from other (ex)colonies like Canada, Australia and Africa may be read.

Syllabus

<i>S.No.</i>	<i>Unit</i>	<i>Mode of Transaction</i>	<i>Hours</i>
1.	<i>Objectives of teaching and learning English at the secondary level</i>	Presentation, group discussion, oral reports, practical work	2
	(i) Second language learning and mother tongue learning	Trainees will study critically the following:	
	(ii) The function of a second language in a multilingual society	(a) Syllabus in English	
	(iii) Role of English in India and its place in the school curriculum	(b) Introduction and objectives	
	(iv) Development of language and cognitive skills	(c) Outline of the course contents of the textbooks and the workbooks	
	(v) The curriculum of English in the secondary school	ITLS Test: 1 hour (This test will determine the trainee's strength and weaknesses)	
Section	Levels of English language-related skills and how to teach them.	Demonstration, listening to tapes, lesson planning	
2	<i>Spoken language</i>	Peer group teaching, preparation of teaching-learning material.	6
	(a) Sounds, stress and intonation patterns, features of pronunciation, e.g. word-stress, sentence stress, stress in nouns and verbs	Language lab. work, ear and speech training.	

(b) Social norms in conversation: responses such as expression of gratitude, regret or appreciation, polite forms of request, instruction, agreement and disagreement, expressions of disappointment or rebuke.

(c) Reading aloud in class, participation in formal and informal discussion or debate, how to ask questions, how to respond to inquiry, how to introduce and thank a speaker, how to interact in an interview situation, how to propose a formal felicitation or condolence, how to take turns in conversation and maintain a dialogue in the classroom

Semantic structure of the language

(a) Semantic fields and how to introduce various areas of meaning and words or lexis connected with them

(b) How to expand the vocabulary of trainees

(c) Use of dictionary and thesaurus

(d) Word meaning in context, how to teach contextual meaning

(e) How to distinguish between and use appropriate synonyms

(f) Dimensions of formal, informal, technical, general, loaded and neutral styles

(g) Vocabulary used to define other words, how to make sure that pupils use it correctly

Remedial work to make the trainee's speech distinct and easy to understand

Note: Intensive training in language skills (ITLS) will start with this course and keep a little ahead of the course unit since the practice of skill comes before the planning of teaching. This unit will need six hours ITLS work, ITLS 6 hours

Demonstration, lesson plans, preparation of learning materials in groups, tutorial work in groups

6

ITLS - 6 hours

4. *Syntax*

(a) How to present grammatical structures in class

(b) How to practice verb patterns

(c) How to plan for remedial work on determiners and prepositions

(d) How to teach important and frequent transformations

Demonstration, peer group teaching, Group evaluation of lesson plans

6

A class project in preparation of learning material, innovative use of role play and drama ITLS- 6 hours

(e)	How to explicate the tense usage in English			
5	<i>Methods of ESL and classroom techniques</i>	Demonstration, lesson planning	6	
(i)	What facilitates language learning?	Preparation of audio-visual aids, group discussion, written reports, class project in preparing details of grading and selection in areas of language Practical work - 6 hours		
(ii)	When is appropriate to use mother tongue or transaction?			
(iii)	Direct, intensive and immersion methods of second language teaching			
(iv)	Selection and grading of teaching items		How to make lesson plans using different techniques, tryout and evaluation. An attempt is to be made under all the four language skills. Each trainee should cover two subunits in each skills, i.e. 8 lesson plans - PW 8 Hrs.	
(v)	The multi-sensory teaching			
(vi)	When to use drill and how?			
(vii)	Communication and basic rules			
(b)	<i>Evaluation</i>			
	New directions in evaluation, continuous and comprehensive evaluation in ELT, diagnostic tests and remedial tests and remedial techniques, self-evaluation and self-correcting exercises, how to make up different kinds of exercises, drill transformation, cloze, how to devise checklists, probes and progress records	5 a. ITLS- 6 hours 5. b. ITLS - 8 hours Peer group testing of tools		

SECTION: DEVELOPMENT OF LANGUAGE SKILLS

6.	<i>Comprehension of spoken language</i>	Demonstration, listening and comprehension practice	4
(a)	How to give pupils practice in listening and comprehension	Preparation of formal exercises for pupils	PW 5
(b)	Types of spoken English and modes		
(c)	Implications of stress and intonation		
(d)	How to make notes while listening		
7.	<i>Communicative skill with special reference to the roles of the Speaker</i>	Demonstration tutorial work	4

(a) What the Speaker wishes to communicate and to whom, how this affects the spoken language	Preparation of learning material making up drills for oral work	PW-5
(b) Use of spoken forms in dialogues, stories reading aloud, dramatization and poetry reading	Recording materials from radio, TV and tapes	
(c) Correct use of stress and intonation and division of utterance into meaningful word groups	ITLS- 5 hours Language lab. and tutorial work	
8. <i>Development of reading skills</i>	Demonstration, peer group teaching, analysis of the textbooks examples for examples of different types of reading required	6
(a) How to teach reading with appropriate speed for various purposes such as studying, looking for information, scanning, etc.		
(b) Reading for overall comprehension, how to practise analysing a text for organisation	Devising further exercises in reading comprehension	PW- 6
(c) Reading for implication and interpretation, how to teach pupils to make inferences	ITLS - Reading skills enhancement	6
(d) Reading for evaluation or how to teach pupils to read critically		
(e) Reading for appreciation of form, style and author's personality		
(f) Reading for facts, reasoning, logical relationships, definitions, generalisation, understanding diagrams		
(g) Reading manuals, charts, schedules and rule books or to follow instructions		
9. <i>Inculcating reading habits</i>	Demonstration	4
(a) How to set real life tasks which require rapid silent reading	Preparing a check list of reading skills	
(b) How to encourage supplementary reading	Preparing a probe for reading problems	
(c) How to teach reference skills using the	Preparing lists of supplementary reading	

	library, reference books, index, bibliography and dictionary	for the textbook—a class project Developing comprehension exercises-home assignment	
(d)	How to appreciate different types of texts—literary, expository, hortative	Understanding the different demands of extensive and intensive reading ITLS- Group tutorial - 4	
10.	<i>Development of writing skills in English</i>	Demonstration	4
(a)	How to teach advanced mechanics of writing, i.e. spelling, punctuation, indenting, title and sub-titles of sections. Underlining quotations, use of parentheses, use of abbreviations, capital letters and correct forms of address in letters, applications, etc.	Planning written assignments, Group work-exercises in usage, grammar and lexis, class project PW 6 Devising written exercises in written English Home assignments—planning of comprehension, exercises and remedial work. The trainees may be given model exercises in composition. ITLS written assignment and discussion	6
(b)	How to teach the organisation of a paragraph, an essay or a paper, i.e. organisation of matter-inductive, deductive or serial and its markers in terms of appropriate linkages.	ITLS tests - 1 hour	

Practicum and Internship Teaching

In the outline of teacher education programme for higher secondary stage, 20 per cent of the time has been devoted to practical work and 20 per cent to internship teaching (at the + 2 stage). As specializations have 20 per cent of the total time of which 10 per cent is for ELT, it will also have 10 per cent of the time for practical work and 10 per cent of the time for internship teaching. This works out to 60 hours each. Suggestions are given

above keeping this time budgeting in mind. The hours refer only to time table hours; quite clearly one hour of classroom teaching will need more hours of preparation than the time table hours. These can only be provided by ensuring that each unit is covered in curriculum transaction strategies and methods of presentation, teaching learning model materials are demonstrated in class and practical work is initiated right from the beginning of the training period and keeps pace with the methods and content enrichment.

Teaching of Mathematics

NATIONAL policy on Education (1986), lays down the importance of mathematics as a vehicle for logical thinking and reasoning. Accordingly, the programme of teacher education should incorporate activities which enable the student teacher to attain a sufficiently high degree of competency in the area of mathematics, especially upto the secondary standard.

It is, therefore, necessary that the mastery over the contents prescribed for secondary school courses should be insisted upon the student-teacher. This should be used in the teacher education programme not only for developing computational and interpretative skills but also as a vehicle for promoting the cognitive, affective and psycho-motor objectives of mathematics education.

NPE (1986) also suggests the use of modern technological devices like computers, in the teaching of mathematics. The student teachers should, therefore, be given instructions to become well versed in the development and use of the

modern methodologies and technologies relevant to the teaching of mathematics. These methodologies should logically match the age group, ability level, course content and the resources available in the school.

The following objectives and guidelines spell out as to how the detailed syllabus for the teaching of mathematics in teacher education course (secondary level) be evolved to achieve the goals set out in NPE (1986).

Objectives

The objectives of the teaching of mathematics course at the secondary level should develop the competencies and skills in the student teacher so that he/she is able to:

1. Define, explain and distinguish the various concept in mathematics
2. Solve mathematical problems
3. Formulate instructional objectives in terms of behavioural outcomes

4. Analyse the content in terms of concept, sub-concept and relation between them
5. Select and organise learning experiences according to the developmental stages of learner
6. Design strategies suited to the teaching of particular content to normal, slow learners and gifted children
7. Draw and interpret diagrams, figures, graphs, etc.
8. Develop and use material aids, like models, charts, projector and other resources
9. Construct diagnostic and achievement tests
10. Employ continuous and comprehensive evaluation techniques to evaluate student's performance
11. Use learner-centred and activity-based approaches for the teaching of mathematics
12. Organise activities like mathematics clubs, mathematics quiz, exhibition, etc.
13. Evaluate mathematics text-material
14. State the modern developments in the field of mathematics
15. Develop computational skills in his students
16. Create interest in students in mathematics
17. Develop among the students an appreciation for the contribution of Indian mathematicians.

Guidelines for Selection of Course Content

The secondary stage comprises of classes IX and X covering the age group 14 + and 15+. The course contents and methods of transaction of teaching of mathematics should be according to characteristics of learners belonging to this particular age group.

The duration of pre-service teacher education programme for secondary stage has been proposed as one year by NCTE. The duration may be utilized for enrichment of course content prescribed for the secondary school students and training in modes and methodologies. Teaching should be activity oriented in the matrix of actual classroom situation as far as possible.

The minimum qualification for student teachers offering mathematics as the subject of specialisation should be a bachelor's degree with mathematics.

The development of mathematical abilities as envisaged in NPE (1986) should be given prominence in the teaching of mathematics in the teacher education programme.

The setting up of mathematics room and mathematics laboratory should be in the *sine qua non* for the teacher education course and efforts should be made to develop them in the teacher education institutions for the guidance of student teachers.

Secondary school mathematics course should form the basis for the methodology course.

The emphasis must be laid down on core

components in school curriculum, e.g. inculcation of the scientific temper through the development of analytical thinking and reasoning as recommended by national curriculum frame work and NPE (1986). Besides this, the three components—elimination of sex bias, observance of small family

norms and protection of environment have to be kept in mind while framing the syllabus.

While developing syllabi or adopting examples, the concentric approach to syllabus formation and correlational approach in transactional strategies have to be kept in mind.

Syllabus

Unit I : The need and significance of teaching mathematics

- (i) Quantification and measurement
- (ii) Developing mathematical reasoning

Unit II: Practical applications of mathematics in day to day life

Unit III: Planning of instruction in mathematics

- A. Selecting the content for instruction, identifying the teaching points for a mathematics lesson, organisation of the content
- B. Stating instructional objectives for a mathematics lesson and identifying learning outcomes in behavioural terms with respect to knowledge, comprehension, application, skills, interest and attitude categories
- C. Content analysis in terms of content categories: facts, concepts, generalization and process, sequencing of content categories
- D. Designing learning experiences: appropriate strategies, teaching aids and evaluation tools
- E. Preparation of unit plan and lesson plan

Unit IV: Strategies of teaching the process and product of mathematics, monitor system, assignments, practical work, project, tutorials, (auto instructional materials)

Unit V: Teaching of arithmetic with special reference to the following topics—

Percentage, ratio, proportion, profit and loss, interest, discount, share, dividend and bank account, and other forms of deposits

Unit VI: Teaching of algebra with special reference to the following topics—

Exponents, algebraic expressions, linear equations, sets, relations, functions, graphs, logarithms, polynomials, quadratic equations, H.C.F., L.C.M. factorization

Unit VII: Teaching of geometry and trigonometry with special reference to the following topics—

Triangles, types of triangles, congruency and similarity of triangles, circles and related theorems, locus, construction and mensuration of solids. Trigonometric ratios, identities, values of trigonometric ratios of some particular angles (0° , 30° , 45° , 60° , 90°), heights and distances

Unit VIII: Teaching of statistics and computation with special reference to the following topics—

Collection, classification and graphical representation of data and its interpretation, measures of central tendency, flow chart and algorithm for solving computational problems

Unit IX: Contributions of Indian mathematicians : Bhaskaracharya, Aryabhata, Ramanujan and of Arabs and Greeks

Unit X Evaluation

- (a) Text material
 - (i) Coverage of course content
 - (ii) Provision of graded/ sufficient exercise
 - (iii) Language of the book
 - (iv) Provision of solved examples and their quality
 - (v) Index and references
 - (vi) Quality of paper, printing, etc.
- (b) Summative and formative types of tests, characteristics of test items, construction of objective test item.

Teaching of Science

IMPORTANCE of science education in the teacher education curriculum has been emphasised by various national educational commissions and it has also been suggested that considerable emphasis should be laid on strengthening the science education. The qualities and values like creativity, spirit of enquiry, courage to ask questions, can be developed through meaningful teaching of science at the school level so as to enable the learner to acquire problem solving and decision making skills. Besides, the close relationship of science with health, agriculture and industry and many other aspects of daily life, can never be denied. Therefore, every effort should be made to extend science education even to those quarters where it could not reach till now.

Science education is an integral part of school curriculum up to the secondary stage; and therefore needs careful and judicious planning in respect to syllabi and guidelines especially in the teacher education curriculum.

The course content is to be based on the objectives it has to realize through a specified

component of teacher education.

In order to evolve guidelines for developing course content in the teaching of science at the secondary level, the following questions arise:

1. What should be the nature of course content for science methodology at the secondary level?
2. How should science method curriculum be transacted at the secondary level?
3. What are the other roles envisaged of the teacher in the context of broader concerns of education to be attempted through the teaching of science?

To discuss the above queries, it may be imperative to defuse or specify objectives of course content in teaching of science at the school stage.

Objectives

The objectives of the teaching of science course at the secondary level should be to develop such

competencies and skills in the student teacher so that he/she is able to:

1. develop an understanding of the nature of science
2. state instructional objectives in terms of specific behavioural outcomes
3. analyse contents in terms of concepts, sub-concepts and the relation between them (concept mapping)
4. construct suitable tools of evaluation, understand continuous and comprehensive evaluation and employ it for feedback and remediation
5. establish the ecology of science classroom to generate a healthy learning environment
6. use appropriate educational technology and develop low - cost teaching material
7. undertake comparative study of science curricula developed by curriculum groups in India and abroad and to familiarize with global concerns in curriculum development
8. analyze and evaluate science syllabus and science textbooks
9. develop skills of organising out of school or extended curricular activities such as science clubs, science fairs, science exhibitions and field studies.

Curriculum Transaction

Science is more than a body of facts, a collection of principles, and a set of machines for measurement. It is a structured and directed way of asking and answering questions. Pedagogical triumph does not lie in teaching the pupil the facts of science but to ensure that these facts are taught in relation to the procedure of scientific inquiry. Science, therefore, should be taught as a procedure of inquiry. The well-taught pupil will approach human behaviour, social structure and the claims of authority with the same spirit of an alert skepticism that he adopts towards scientific theories. It is here that the future citizen will learn that the science is not memory or magic but rather a disciplined form of human curiosity.

Among the techniques of instruction which play an important role in the type of effective curriculum transaction involving activity based approach, the teacher has to be apt at—

- Planning of activities
- Preparing the students for activities
- Conducting and supervising activities
- Conducting discussion, and
- Designing activities for evaluating learning outcomes.

Planning of activities involves that the teacher should be equipped suitably to understand the general objectives of the course, the specific objectives of each unit, and plan suitable activities, work out time schedules, material checklists. Though a teacher can perform these tasks, he need not

do it himself. This task may be delegated to the curriculum framers instead. Using a suitably prepared teacher's handbook, he/she should be expected to perform the teaching task efficiently and without undue strain.

Preparing the students for activity involves introduction of the subject, identification of the problem, evolving a strategy for solving the problem, getting the pupils and material organised.

Group discussion involves pooling of various ideas (from students), leading a discussion, encouraging and ensuring maximum participation of students, encouraging these students who are shy, lack confidence and are generally non-participative. Restraint on the part of the teacher from monopolizing talk time is an important skill.

In short, activities for teaching/learning may encourage pupils to:

- Formulate hypotheses
- Ask questions
- Experiment with new ideas
- Stimulate creative thinking, and
- Solve problems.

Activities for evaluating learning outcomes may be organised under the following three broad areas:

- (a) Operational/functional understanding of scientific principles/concepts
- (b) Competence to solve problems, and

- (c) Development of scientific attitudes, interest and appreciations. Such activities may include; teacher's observations, situational problem solving, participation of the pupils, assignment of project, short quizzes, paper and pencil test and student's performance at work, etc.

Teacher's Role 'beyond' Classroom

The principal role of the teacher will essentially be teaching and guidance of the pupils through:

- Classroom instruction
- Tutorials
- Personal contact
- Other ways for building the character of the students.

The teacher has to undertake upon himself/herself the role of a researcher to undertake small case studies of his/her students and to design appropriate strategies. Thus, he/she should be able to undertake or promote research, experimentation, extension and social service and be able to participate in management of a variety of service and activities organised by the institutions and such a provision has to be provided in the teacher education curriculum.

In the light of the above concerns, the expectations from a prospective science teacher are varied. Thus, the science teacher should be able to:

- *Inculcate* in the students the relationship of science with health, agriculture, industry, environment, nutrition and other aspects of living.

- *Use* scientific knowledge in erasing false beliefs, prejudices and practices prevailing in the society.
- *Develop* in students decision making and problem solving skills in daily life situations.

Guidelines for Formulating Course

- (a) The time allocation for the one-year programme for secondary teacher preparation is 120 hours for teaching of science and the course content in science teaching must be in accordance with this time.
 - (b) More emphasis should be placed on the student teacher actually performing the tasks he/she is being trained for. The methods used must reflect the methods expected of the student teacher in the classroom situation.
 - (c) Activities like exhibitions and field trips should form an integral part of the course content as these help the student teacher in enhancing the knowledge base and boosting the confidence of the student in appreciating relevance of science.
 - (d) The techniques of evaluation should be so incorporated that the student teacher is able to effectively evaluate the learning outcomes.
- (e) Various innovative programmes in science education developed in the Indian context should be highlighted.
 - (f) The course content in the teaching of science should provide for alternative content and transactional strategies so that student teacher has flexibility and choice in making curriculum transaction effective.
 - (g) Enrichment activities in science, which may be improving teaching-learning, may be provided for in the syllabus.
 - (h) It may be quite imperative that the student teachers learn about and practise inquiry approach. This approach may encourage the “inquiry”, the “experimental” or “discovery” approach to demonstrate science as a discipline which lays emphasis on inductive learning, problem solving and creative thinking.
 - (i) The development of scientific temper may have significance in the methods of secondary science teaching in the teacher education curriculum.
 - (j) It should help in developing mastery over approaches of individualized instruction with specific reference to PSI, and computer aided instruction.

Syllabus

SYLLABUS OUTLINE FOR SCIENCE METHOD COURSE

Total - 120 hours

Unit 1: Nature of science

- Nature and scope of science
(Explaining the terms: Nature of Science)
- Substantive structure
- Syntactical structure

Unit 2: Objective-based science teaching at secondary level

- Aims and objectives
- Types of objectives
- Statement of objectives of behavioural terms
- Relating objectives with behavioural outcomes
- Defining minimum levels of learning

Unit 3: Learner centred and activity-based approach to teaching of science

- Concept approach (how concepts may be acquired through activities)
- Process approach (write different processes of science)
- Individualized instruction (explain its need and importance)
- Programmed learning (develop one unit of programmed learning material)
- Computer aided instruction

CURRICULUM TRANSACTION

Unit 4: Science curriculum

- Explaining the term curriculum: determinants of curriculum and principles of curriculum organisation
- Science curricular projects: some examples, India/abroad, PSSC, BSSC, Chem study (study these projects and write characteristics of each)

- Emerging trends
- Analysis and evaluation of syllabus and textbooks. (develop an evaluative criterion and conduct an evaluative study of a science syllabus and science textbook)

Unit 5: Transactional strategies

- Analysis of content and identification of concepts (student teachers to write 10 concepts from a unit each from any two school science subjects)
- Listing instructional objectives and behavioural outcomes (student teachers to write 10 behavioural outcomes for each unit—each from a topic in any two school science subjects)
- Selecting and developing learning activities/experiences at the secondary level (develop learning activities for three lessons in any two teaching subjects—Physics, Chemistry, Biology. Mention the developmental stage of children at the secondary level)
- Preparation of lesson plan/unit plans (write 6 lesson plans—three each in any two teaching subjects and two unit plans)
- Maintaining ecology of the classroom (write factors related to ecology of the classroom)
- Preparation of low cost improved apparatus, (prepare two apparatus)
- Preparation and use of multi-media materials (develop a radio script for educational broadcast)

Unit 6: Laboratory management and safety

- Lab. equipment
- Designing of a science lab.
- Management of a science laboratory
- Safety and precautionary measures in a science laboratory

EVALUATION IN SECONDARY SCIENCE

Unit 7: Extra curricular activities in science teaching

Student teachers shall be asked to prepare an outline for organising the following:

- Field study with a special reference to science education
- Science club
- Science fair
- Science exhibition
- Identification and use of community resource

Unit 9: Evaluation

- Explaining the terms: evaluation, comprehensive and continuous evaluation
- Student teachers shall develop 100 test items in science (different types)
- Determine the need of diagnostic testing and remedial measures
- Prepare a diagnostic test
 - (a) Prepare an achievement test
 - (b) Use criterion reference test
- Analyse and interpret test data collected through field work)

INNOVATIVE EXPERIENCE IN SCIENCE EDUCATION

A study of some innovations for improvement of science education (student teacher should be asked to write papers on the following which will be discussed in the seminar). This could be done through project work.

- Nehru Science Exhibition
- Mobile science vans (laboratories)
- Vikram Sarabhai Science Centre, Ahmedabad
- Kerala Sastra Sahitya Parishad
- Ekalavya Project.

Teaching of Social Sciences

THE educational system of a country is an expression of its unique national socio-cultural identity. It should help to meet the challenges of the time. India today is facing great challenges. Her political and social life is passing through a phase which threatens to erode our long cherished values. The accepted national goals of secularism, socialism, democracy and social ethics are under increasing strains. Sometimes, even the unity and integrity of the country is threatened by the forces of disintegration. It is, therefore, of utmost importance that the ideas and values which are in keeping with these national goals should be strengthened and the coming generations be imbued with strong commitments to human values, social justice and national unity and integrity.

With a view to meeting these requirements, some new thrusts have been envisaged in our education. These are study of India's freedom struggle, values as enshrined in the constitution, protection of environment, removal of social and sex biases, development of scientific temper, and adhering to small family norms, etc. These ele-

ments which reflect the emerging national concerns and imperatives are expected to develop in the learner desirable values, attitudes and skills to facilitate his/ her growth into a well informed, enlightened and responsible citizen. They are also intended to strengthen national identity and social cohesion. Social sciences are very potential areas of study to develop these values and attitudes, and therefore, occupy a place of crucial importance as a component of general education.

To be able to achieve these objectives, the teachers of social sciences require a new kind of orientation in terms of their content competence and the skills needed to transmit the content of social sciences to the learners. If the social sciences teacher is to act as a catalyst in the process of developing a citizen who is productive, believes in social justice, and committed to the societal goals, he/she needs to become such a citizen. Restructuring the course in the methodology of teaching social sciences in the teacher education curriculum is, therefore, very essential.

Present Status

At present the curricular area in the teacher education curriculum is found deficient in many ways.

First, the changes that have taken place over the years in syllabi of the subjects of social sciences, approach to curriculum construction, and in objectives of teaching are not adequately reflected in the teacher education course, particularly in the methodology of teaching social sciences.

Secondly, this course is by and large taken as information oriented seeking to impart theoretical knowledge of activities that should go on in the classroom. In other words, it mostly deals with principles of teaching in isolation of the subject matter.

Need for Change and Reform

If the objectives of teaching social sciences are to be achieved and also if the special competencies expected of teachers of social sciences are to be developed, the curricular area in the teacher education programme should be made task oriented. This could be done by giving more importance to the application of the principles of learning than to the development of their theoretical understandings only. This can be done by properly integrating principles of teaching with the content of the subject matter of social sciences. For this, in-depth study and analysis of the content of the topics selected for integration will have to be done.

Methodology of social sciences in teacher edu-

cation course should provide for innovations. It should reflect the concern for removal of obsolete content and methodology and for establishing linkages with the structure of knowledge and patterns of mental development among adolescents. The idea of methodology as a mediating process and teacher as a facilitator has direct implications for drawing up stagewise instructional objectives and strategies. This calls for reorientation of the content and of the process of teacher education which are to be inter-woven into teaching-learning strategies.

Methods of Teaching Social Sciences

At the secondary stage, subject approach to curriculum construction and teaching is adopted. History, geography, civics and economics are being taught as separate subjects under the general title of social sciences. The content competencies and the modes of transaction are different for different subjects. Hence, they will be dealt with separately. It is, therefore, necessary to develop separate methodology course in history, geography, civics and economics.

Instructional Objectives

To enable student teachers to:

1. Develop an understanding of the nature, structure and scope of social sciences (history, geography, civics, economics); appreciation of the importance of studying history, geography, civics, economics and sociology in the context of the emerging concerns and needs of Indian society.

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| <p>2. Develop an appreciation of the role and significance of social sciences for national and social reconstruction.</p> <p>3. Develop competence to correlate the information from different social sciences.</p> <p>4. Develop scholastic competencies involved in information processing through appropriate strategies.</p> <p>5. Develop an understanding of the inter-relationship between man and environment and inter-dependence of nations.</p> <p>6. Develop an understanding of appropriate teaching – learning strategies in each of the social sciences and develop skills in employing these strategies.</p> <p>7. Develop an understanding of various group strategies and the need to involve students in</p> | <p>various group activities to promote collective learning.</p> <p>8. Develop understanding of new methodological developments that have recently taken place.</p> <p>9. Develop an understanding of the changed role of the teacher as a facilitator.</p> <p>10. Develop an understanding of the concept and practice of continuous and comprehensive evaluation and to develop the skills in preparing and using different types of evaluation tools in various subjects of social sciences.</p> <p>11. Develop the skills of using local environment, community resources and other instructional inputs in the teaching of social sciences.</p> |
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Syllabus

120 Hours

Unit I: Social sciences

10 Hours

Meaning and concept of social sciences and social studies—history, geography, civics, economics and sociology as social sciences; meaning, nature and scope of each subject, aims and values of teaching each subject, relationship between different social sciences, inter-disciplinary approach, the meaning and scope, its utility in explaining the past and current events.

Unit II: Curriculum in social sciences

5 Hours

General approach and underlying principles of curriculum construction, their

applicability in construction of curricula in history, geography, civics, economics and sociology, correlation between different subjects

Unit III: Curriculum materials in social sciences 10 Hours

Need of a good textbook: quality and design, criteria for selecting good textbooks in different subjects, quality of the content, its organisation and presentation, illustrations and exercises, physical features of the textbook, collateral reading material — fictions, journals, newspapers, travelogue, etc.; their use, use of teachers guides and source books

Unit IV: Planning instruction in social sciences 15 Hours

Considerations for developing instructional objectives, instructional objectives of each subject, viz., history, geography, civics, economics and sociology, general and specific objectives in cognitive, affective and psychomotor domains, consideration for developing instructional objectives of a particular topic/lesson, general and specific objectives, content analysis of a topic in terms of major ideas, minor ideas, concepts, facts, etc., developing resource plan, lesson plan.

Unit V: Implementing instructions 20 Hours

Methods and techniques of teaching social sciences (treatment would be subject wise)—lecture method, conversation method, discussion method, source method, problem solving and project methods

Techniques: questioning, using blackboard, dramatisation, etc.

Unit VI: Audio-visual devices 20 Hours

Use of audio-visual and other relevant community resources in teaching of different subjects of social sciences

- Objects, specimen, pictures, models, graphs, charts, maps.
- Slides, film strips, tape recorders, radio, TV and VCRs

Unit VII: Evaluating instructions/learning

20 Hours

Concept of evaluation including continuous and comprehensive evaluation as applied in teaching of social sciences, need for and criterion of systematic evaluation in social sciences, peculiarities of evaluation in each social science subject, different types of evaluation tools and their merits and limitations, unit tests — their construction and uses in the area of social sciences.

Teaching of Health and Physical Education

HEALTH and physical education is a sector of fundamental importance to both individual and society. There is a tremendous growth of awareness of the importance of health and fitness, and it is essential that the curriculum at the teacher education level is renewed continuously to respond to the future challenges. The teacher education curriculum has to be dynamic enough to respond to the changing priorities.

The programme designed here is not rigid and prescriptive, but a flexible one to accommodate local and regional needs, individual differences, creative and innovative ideas and practices. Objectives are clearly stated and emphasized. The curriculum emphasized integration of theoretical understanding with practical application without overdoing one or the other. The curriculum provides ample scope for the teacher pupil activities.

Objectives

The purpose of inclusion of health and physical education in the teacher education programme is to prepare teachers to provide support to the organisation of activities in the area. They should also keep healthy and present themselves as models before their students. The student teacher should acquire knowledge, develop skill and favourable attitude to function effectively as a support teacher. In order to do so, he should be able to:

1. Develop awareness of keeping good health, (i.e. physical, mental and social).
2. Enable them to understand the need and importance of physical activities to promote health.
3. Develop skills to promote physical fitness.

4. Enable them to apply the knowledge of safety, physical skills, social skills, rules and strategies in the related activities.
5. Promote interest in sportsmanship, leadership, human relations and resourcefulness.
6. Develop favourable attitudes and desire to participate in physical education activities.
7. Appreciate team spirit and respect for rules and regulations.
8. Organise co-curricular and recreational activities.
9. Understand and appreciate healthful school living.
10. Develop desirable, habits and attitudes related to health.
11. Understand the importance of sanitation at home, school and community.
12. Understand the importance of balanced diet.
13. Plan balanced diet for the children of different age groups and sexes.
14. Understand various systems of the body, their functions and care.
15. Appreciate small family norms.
16. Develop knowledge and skills of safety and first-aid at home, school and community.
17. Acquaint with the harmful effects of smoking, drinking and drug abuse.
18. Identify communicable and non-communicable diseases.
19. Discuss and explain the concept of yoga.
20. Explain the importance of yoga for the welfare of mankind.
21. Explain therapeutic value of yoga, both in preventive and rehabilitative measures.

Guidelines for Selection of Course Content

Health and physical education being an integral part of education in schools, should be an integral component of teacher training programmes.

Five per cent of the total allotment of teacher training time is allocated to health and physical education. That would come to 60 hours (for 50 marks assessment). The distribution of time may be considered as 20 hours for health education, 30 hours for physical education and recreation and 10 hours for yoga.

The teacher trainees are adult graduates. Health and physical education programme, as a core programme, includes such basic components of activities meant to develop knowledge, understanding, attitudes, skills and abilities in the area of health education, physical education, games and sports, recreation and yoga. Naturally games, sports and out-door adventure activities should also form part of syllabus.

Provision should be compulsorily made in the syllabus for teaching yogic exercises, which may be held either in the early morning or in the evening.

education activities for becoming more helpful as professional teachers in the organisation of different activities.

All the teacher trainees are to be encouraged to participate and master not only the prescribed activities for their mastery but also varied physical

Provision for the availability of essential equipment should be made in the institutions of teacher education.

Syllabus

60 Hours

Unit I: Health and health education

- Meaning and concept of health: Inter-relationship of physical, intellectual and social dimensions of health, meaning, importance and principles of health, education

Activities — The pupil teacher should carry out the following activities:

- Identification of students possessing normal health and poor health and studying their physical, mental and social characteristics
- Writing twenty lines on topics like “Importance of health for complete living”, “Physical, mental and social dimensions of health”, “Need and importance of mental education”, “Principles and content of health education at secondary level.”

Unit II: School health programme

- Aspects of school health (a) healthful school environment (b) school health services and (c) health instruction: role and responsibilities of teacher in school health programme

Activities — Preparation of checklist for assessment of healthful school environment, school site, building, classrooms including furniture, ventilation and lighting, safe drinking water facilities, sanitation, drainage, etc.

- Preparing an ideal school plan and time schedule and observation of students for defects and deviations from normal health practices
- Organisation of health days (WHO Day, World AIDS Day, Tobacco Day, etc.)
Organisation of sanitation week, beautification of the campus week, etc.
- Conducting survey of the community

Unit III: Environmental sanitation and health hazards

Safe drinking water, proper use of toilets, drainage facilities and environmental cleanliness for health promotion and prevention of sickness, hazards of air and water pollution

Activities — Listing out the characteristics of different places (open and clean, dirty and congested areas, etc.)

- Cleaning and beautifying classroom and school campus
- Checking of cleanliness by rotation
- The teacher educator will form the groups and supervise the activities

Unit IV: Personal appearance and good grooming

Importance of personal cleanliness and good grooming for physical, mental, emotional and social health of school children, importance of graceful posture, correct postures for various activities

Activities — Observation and evaluation of nails, hair, teeth, ear, clothing and shoes of students by student teachers and providing them “stars” on this basis

- Demonstration of good, graceful postures for different activities by teacher educators
- Correction and checking of postures by student teacher, captain or leader of the house under the guidance of teacher educator

Unit V: Food and nutrition

- Nutritional needs of body, nutritive value of locally available food, balanced diet, principles of diet planning, under and over nutrition, caloric requirements for different sexes

Activities — Preparation of low cost balanced diet and nutritive food by student teachers like *Dalia*, *Pulav*, groundnut chikki, solid food for infants made of *rawa* and groundnut powder, *sattu*, etc.

— Preparation of balanced diet, charts and posters

Unit VI: Growth and development

— Body system : their functions and care (digestive, respiratory, excretory)

Activities — Preparation of a questionnaire for investigating the problems of adolescents

— Preparation of chart showing body system

— Identifying the differences in growth rates of males and females and care of private parts

Unit VII: Family life education

— Importance and need of family for individual, child care and family welfare services

Activities — Survey of small and big families for studying their characteristics

— Symposium and debate by different groups on family life education

Unit VIII: Safety, first-aid and home nursing

— Safety at home, school and road

— Common accidents in home and community and their prevention, first-aid for falls, burns, bites, shocks, cuts, sprains, dislocation

Activities — Identification of places prone to accidents

— Writing steps of first-aid for different accidents

— Preparation of scrap book on road signs

— Study of road signals

— Simulated situations for providing first-aid and simple dressings and management of snake and dogbites

Unit IX: Enemies of health

- Tobacco, smoking, alcohol and drugs
- Effect of these enemies on an individual, family and social life, preventive measures and rehabilitation

- Activities* — Celebrating anti-smoking day, anti-alcohol day, anti drugs day
- Organisation of awareness weeks and exhibitions on enemies of health

Unit X: Communicable and non-communicable diseases

- Interaction between agent, host and environment for production of common communicable and non-communicable diseases, common signs and symptoms, common preventive steps and explanation with examples

- Activities* — Discussion on common features of localities affected by communicable diseases
- Preparation of charts
 - Organisation of exhibition on preventive steps

Unit XI: Modern concept of physical education

Meaning of physical education, objectives of physical education, fitness components, relationship to education

- Activities* — Comparison of different pupils in terms of fitness and health, analysis of different behavioural reactions during actual play

Unit XII: Programme of physical education

- Classification of physical education activities, programme of physical education, core programme and optional programme, intra murals and inter-collegiate participation

- Activities* — Developing an understanding in the mind of student teacher about wide perspective of physical education activity

Unit XIII: Organisation and administration of physical education

- Planning competitions (for practical experience), organisation and administration of sports competition
- Knowledge of intramurals and extramurals, officiating and coaching of selected activities, knowledge and modes, evaluation

Field activity— Each listed activity, e.g. (Foot ball is analysed on the field for skills as well as for rules and their implications)

- Activities* — The teacher educator will divide student teachers into different groups and organise different activities
- Discussion on each activity (sub-unit wise)

Unit XIV: Officiating and coaching

- Rules of officiating, supervision of officiating.
- Kho-kho, Kabaddi, Tenni koit, Foot ball, Volley ball, Cricket, Hockey, Table Tennis, Badminton, Track and field
(This includes the marking of courts and field)

- Activities* — Student teacher should practise rules and regulations of different games
- They should also practise marking to courts and fields

Unit XV: Methods of teaching physical education

- Whole method
- Whole part-whole method
- Part - whole method
- Demonstration method

Activities — Each student teacher should attempt to break down the skills of games and activities first on paper and then practise it on field or skill of game is practised on the play field in groups

- One group may practise and other group may observe
- Teacher educator may supervise and suggest modification

Unit XVI: physical education activities

- Teaching fundamental skills of physical activities
- Participation in major games (any one ball game, i.e. Football, Volleyball)
- Individual sports and dual sports (any one, i.e. Badminton, Tennis)
- Gymnastics, swimming, rhythmic, combatives
- Out-door adventurous activities : hiking, rock climbing, boating, trekking and camping
- Indigenous activity : Kabaddi, Kho-Kho

Activities — The teacher educator will divide student teachers into different groups and organise competitions

- The student teachers will take active part in the mastering skills of each game which has been demonstrated by the teacher educator
- The teacher educator will supervise the activities of the different groups

Unit XVII : Recreation

- Concept of recreation, effective utilization of leisure
- Minor and lead up games
- (a) King of the ring
- (b) In the pond on the bank
- (c) Cat and rat
- (d) What is the time Mr. Wolf?
- (e) Free the prisoner
- (f) Simple relay - cant relay
- (g) Zig-zag relay
- (h) Crab foot ball - line foot ball
- (i) Circle hockey
- (j) Whip tag kabaddi
- (k) Tennis ball cricket
- (l) Foot ball cricket
- (m) Circle kho
- (n) Line kho

Activity — the students will be divided into different groups and practise above activities

Unit XVIII: Evaluation of physical education activities

- Different tests and measurement
- Identifying and analysis of fitness and health in terms of its components and selecting appropriate testing and utilizing them in field situations, measurement of—
- Strength : comparison between two partners
- Stamina : 12 min Cooper's walk and run test
- Flexibility : bending down to reach as far as possible, etc.

Activities — Asking student trainees to develop their own tools for measuring and analyzing health and fitness and skills in different games

Unit XIX: Concept of yoga

- Concept, need and importance of yoga in present times, yoga in relationship with other approaches to health, important instructions and precautions regarding yoga practices, yoga for prevention and rehabilitation of disease.

Activities — Visit to nearby yoga kendra

- Yoga expert may be invited for lecture and demonstration

Unit XX: Sukshma vyayama (subtle exercises, anti rheumatic and anti gastric exercises)

(a) Walking on the toes, (b) tightening the knees, (c) hand clenching, (d) wrist rotation, (e) elbow bending, (f) pressing the palms at the chest, (g) bending the feet-forward, backward and rotation (clockwise and anti-clockwise), (h) bending and releasing the toes, (i) bending and releasing the knees, (j) bending forward, backward, sideways, tilting, rotating (clockwise and anti clock-wise)

Eye exercise : movement, side-ways, top, bottom, rotating, gazing at the tip of the nose centre, eyebrows

Acu pressure : concept of acu-pressure, pressing at the centre of the eye-brows, at the right and left temples, at the back of the neck

Activities — Practice by the student-teachers

Unit XXI: Yogasanas

- Standing postures : Ardha-chakrasan, Trikonasan, Padottanasan
- Lying postures : Baddha Konasan, Paschimottanasan, Chakrasan, Shalabhasan, Pawanamuktasan, Makrasan
- Inverted Asanas : Sarvangasan, Halasan, Matyasan
- Sitting asanas : Padmasan, Vajrasan, Suptavajrasan, Yoga Mudrasan, Tolasan, Gomukasan, Shashanakasan
- Shivasan

Activities — Practice by student teachers

Unit XXII: Pranayam

1. Ujjayi Pranayam :
 - (i) Sectional breathing
 - (ii) Mudras : Chin Mudra, Chinmaya Mudra, Adi Mudra, Meru Danda, Purna Mudra
 - (iii) Mukha Dhouti
2. Nadi Shodhana Pranayam, Kapalabhati
3. Bhrahmari Pranayam with Shanumukhi Mudra
4. Shitali Pranayam

Activities — Practice by the student teachers.

Special Education for Disabled

PERSONS with disability constitute the least served group in the drive to achieve the goal of 'education for all'. The fact has been recognised in the National Policy on Education. It has been justifiably brought in the section on equal education opportunity.

The NPE has recommended education of children with disability, as far as possible, in common with others in general schools. The Programme of Action has updated the placement principle. No disabled child who can be educated in general school should be placed in special school. Even if a child is placed in a special school because of the severity of disability, he/she should be brought to a general school as soon as he/she acquires the self help, communication and basic academic skills. The implication is that more and more children with disability will join general schools. The fact is that large number of children with mild disabilities do enter the school system but many drop out due to the lack of sensitivity to their educational needs in the system. To achieve the goal of 'education for all', the school system needs to be adequately prepared.

Teacher is the single factor standing clearly in the school system who matters most in meeting special needs of children with physical, sensory and intel-

lectual disabilities. The preservice and inservice teacher education programmes therefore need re-orientation to equip teachers to meet special needs in classroom.

The framework for primary and secondary curriculum suggests improved access of children with disability to different curricular areas. The framework for teacher education has also suggested that all prospective teachers should receive essential knowledge and skills to deal with educational needs of these children. At the primary level, this area has been allotted 5% weightage in terms of time. The area has been titled as "Education of the Disabled-Implications for Teacher Education". At the secondary level, it is proposed to offer this component as an elective area just like other special areas.

The guidelines are confined to the component input in preservice training of general teachers and do not cover single disability or multicategory training of special teachers. For this, two levels of course input has been designed.

Level one envisages essential components of special education integrated into relevant teacher education courses at different levels. This alternative

to a separate course in special education is preferred for several obvious advantages. In relevant courses it will receive the same emphasis as the relevant course. No prospective teacher will be able to undermine the course which is likely, if it is offered as a self contained separate course, at least by some student teachers. Secondly, it will not be perceived as additional curriculum load. It will be perceived as organismic component of general education. Thirdly, it will prepare teachers to meet broader special needs in classroom. Finally, it is going to be a significant step towards fusion of special and general education.

Level two course on special education will be a self contained advance course which can be opted by the prospective teachers who are interested in gaining higher knowledge and skills in this area. This course will include plus curriculum areas for children with sensory, intellectual and physical impairments. If one teacher with this level of course is available in each school, the school can meet the needs of most of the children with special needs.

After completing level one course, the student teacher will acquire:

A. Essential knowledge about—

- (i) Special needs of children with physical, sensory and intellectual impairments in the context of 'education for all'.
- (ii) Identification and assessment of special needs in classroom.

- (iii) Curriculum adjustment and adaptation of instructional procedures for improved access of children with special needs to different curricular areas
- (iv) The use of different resources for functional classroom management to meet special needs in classroom.

B. The skills to—

- (i) Identify special needs;
- (ii) Work with other professionals, wherever necessary to assess special needs.
- (iii) Plan and implement instructional procedures adapted to special needs, and
- (iv) Handle special aids and equipment used for overcoming disability effects of children.

C. Positive attitude towards—

- (i) Disability and children with disability.
- (ii) Abilities and commonalities among disabled and non disabled children rather than disability and differences, and
- (iii) Their own capability to design learning environment for all children in classroom.

The content of the essential component 'special education for disabled children, along with the teacher education course in which it can be plugged, has been outlined in the table below:

Table 1 : Level One Course Content***Unit I : Children with Special Needs, and Equal Education Opportunity***

- Right to education
 - Education for all
 - Equal education opportunity
 - Special needs and education for all
 - Factors resulting in special needs (within child, in home and school environment)
 - Special needs arising out of physical, intellectual and sensory impairments
 - Educational provision—special and general schools
 - Related terminology
- (to be plugged in the foundational course I)*

Unit II : Identification and Assessment of Children with Special Needs

- Need for early identification
 - The identification process (who should do and how?)
 - Appearance and behaviours for identification
 - Professional assessment
 - Tools and procedure
- (to be plugged in course on educational psychology under individual need including practicals and practice teaching)*

Unit III : Curriculum Adjustment and Adaptation to Special Needs Arising out of:

- Visual impairment
 - Hearing impairment
 - Orthopaedic impairment
 - Low level of intellectual functioning
 - Learning disability
 - Multiple impairments
- (to be plugged in relevant curriculum and teaching courses)*

Unit IV : Special Aids and Equipments

- Aids for sensory impaired children
 - Educational toys and other aids
- (to be plugged in courses dealing with teaching—learning aids in different teaching areas).*

Unit V : Classroom Management

- Seating arrangements for children with special needs
 - Utilizing resources for meeting special needs employing
 - Cooperative learning
 - Peer tutoring
 - Parent partnership
- (to be plugged in course on teaching including practice teaching)*

Unit VI : Evaluation Procedures Adjusted to Special Needs and Recording of Progress of Children with:

- Visual impairment
 - Hearing impairment
 - Low level of intellectual functioning
 - Learning disability
 - Multiple impairments
- (to be plugged in course carrying evaluation unit in different teaching subjects).*

After completion of this course, the student teachers will acquire:

A. Essential knowledge about—

- (i) Daily living skills for children with different disabilities.
- (ii) Procedures and techniques for orientation and mobility
- (iii) Methods of teaching braille reading and writing, and
- (iv) Methods of teaching language and speech development in hearing and speech training.

B. Skills to—

- (i) Use braille kit and brailier
- (ii) Use mobility aids and giving mobility training
- (iii) Handle special aids and equipment and simple repair and maintenance, and
- (iv) To organise language and speech training for hearing and speech impaired.

C. Positive attitude towards—

- (i) Disability and disabled persons, and
- (ii) Their own capability to use special methods and equipment.

Table 2 : Level Two Course Content*Unit I : Daily Living Skills for:*

- Visually impaired
- Hearing impaired
- Children with low level of intellectual functioning
- Learning disabled
- Orthopaedically handicapped
- Multiple handicapped.

Unit II : Orientation and Mobility

- Physical orientation
- Pre-cane skills
- Cane skills
- Mapping and landmarks
- Other aids to mobility.

Unit III : Braille Reading and Writing

- Pre-braille reading skills
- Braille reading skills
- Braille writing skills
- Braille reading and writing speed.

Unit IV : Language and Speech Training

- Language and speech training for hearing and speech impaired
- Total communication.

Unit V : Special Aids and Equipment

- Braille kit, Braille, Thermoform machine, aids for reading—writing for low vision children, speech trainer, hearing aid, etc.
- Educational toys
- Use
- Simple maintenance and repairs.

Unit VI : Organisation of special services

- Support to peer teachers
- Providing plus curriculum skills to children
- Mobilisation of support from governmental and non-governmental organisations

The level two course is an elective advance course. Both courses can equip the general education system to meet special needs in classroom.

Practicals

In level one course, practicals like identification of special needs and assessment will be carried out under the relevant course. Teaching to meet special needs will be included in practice teaching programme relating to each curricular area. Adaptations of curriculum and methods of teaching to special

needs can also be undertaken in each of the curricular areas. In level two course, practice will be provided in each of the skills with at least one visually impaired, hearing impaired and educated mentally retarded child. Hand on experiences will be provided in the use of special aids and equipment in resource centres. Visit to other institutions dealing with disabled children can also be organised.

Teaching of Art Education

ART is considered to be an integral component of the curriculum all through. Art work at school is not comparable with what we generally see in museums or in classical performances. A school's creative art programme finds its way in a child's natural way of doing, playing and making various art forms in his own way in response to his day-to-day life experiences with a variety of media and material to give form to his feelings, thoughts, emotions and fantasies. There may or may not be any tangible material and product. The process and experience which shape the child are the most important aspects of art education.

The following have been kept in view while evolving guidelines for development of course content for the teaching of arts at elementary and secondary level.

- (i) The arts involve all elements of commonly known art forms—visual, performing and language arts, namely music, dance, drama, drawing and painting, modelling and sculpture or construction work, pottery and

ceramic work, poetry and creative writing, creative speech and other connected craft forms.

- (ii) Art education programmes are designed to develop in the teacher the ability to appreciate and discover beauty in various life situations and integrate it into one's own personality. It should enlighten him on the relationship of the arts and crafts with life and culture of the nation.
- (iii) At the secondary level the academic profile of student teacher is graduation, therefore, the course design is intended to sensitize the student teacher for the development of appreciation and understanding of various arts — visual and performing should also facilitate the student teacher in teaching other subjects effectively. However, at this stage, it is expected that there will be separate professionally qualified art teachers to teach art subjects in the classroom.
- (iv) It is realized that carrying out various art

activities requires more time but it should be kept in mind that content of the course is to stimulate the student teacher to gather more information and knowledge from programmes presented or witnessed elsewhere.

What is taught under the subject, has a particular significance because of the rapidly changing physical and intellectual development of students and the mass culture to which they are exposed. Therefore, the aims and objectives of the training programme need to be thought out very clearly and their realization carefully planned in relation to the administrative support and physical resources that can be obtained.

Objectives

While developing the course content for teaching of arts for secondary teacher education, the thrust will be on the acquisition of the necessary teaching competencies and skills in relation to this particular curriculum areas.

Therefore, the objectives of art teacher education should be to develop such competencies and skills in the student teacher so that he/she is able to:

1. Provide creative situations for sensory stimulation to develop and sharpen the student's senses through keen observation of the environment.
2. Help the student develop a sense of organisation and aesthetic sense in him.
3. Sensitize the student so that he may learn to respond to the beauty in line, colour, form, movement and sound.
4. Help the child discover and identify his own potential, experience the self and relate the same to the surroundings through different modes of expression.
5. Help the child to achieve a balanced growth as a social being in tune with his own culture.
6. Enable the student to discover his own preferences through exposure to a variety of media and materials.
7. Make the student aware of various art forms available in his own environment or locality.
8. Plan suitable activities and select appropriate resources for the child.
9. Plan activities depending upon the developmental stage, the child is passing through.
10. Design suitable activities for special needs children such as slow learners/mentally retarded/hearing impaired/visually handicapped, orthopaedically handicapped and learning disabled children.
11. Understand the scope of interaction of arts with other school subjects.
12. Understand the concept of continuous evaluation and use it for remedy.
13. Organise various arts displays, field trips,

meetings with known artists, dramatists/musicians and dancers.

4. Organise inter-group, inter-school art activities

Guidelines for Formulating Course Content

At the secondary stage, teachers should encourage students to mobilize their own resources to solve problems of their creative expression. In general, students at this stage need to develop aesthetic sensibilities through projects on conservation of national and cultural heritage. For this purpose, art education at this stage should comprise:

1. Study of Indian culture

5. Study trips, visits to historical places, museums, attending programmes of music, dance and interaction with artists/artistes in the community.

2. Study of visual and oral resources and their explorations

6. Exploration of traditional art forms available in the community and neighbourhood.

3. Projects leading to creative expression and exhibition of the work in visual and oral forms

7. Organisation of festivals and celebrations of the community of the region.

8. Students may organise exhibitions, displays and aesthetic organisation of physical environment by enhancing the surroundings, i.e. landscaping including plantation; developing a school museum and murals with a view to creating awareness of topics like the culture of each state of India and science, community, religion and the arts.

Syllabus

120 Hours.

Unit I: Nature of art education

8 Hours

- Importance of arts in life
- Objectives of art education
- Outstanding contribution by Indian artists/artistes

Unit II: Indian arts and culture

10 Hours.

- Knowledge of Indian art and culture
- Media of expression in visual, performing and literary arts

Unit III: Undertaking project work in art education 40 Hours.

- Undertaking practical experiences in visual, performing and literary arts through project work
- Exploration of traditional art forms available in the community and neighbourhood

Unit IV: Participation in arts 46 Hours

- Participation in local and national festivals
- Organisation of displays and exhibitions on art and craft
- Witnessing live performances in music, dance, drama
- Writing critical appreciation on any one art event attended
- Visiting museums, art exhibitions, theatre and other places of cultural importance

Unit V: Relationship of arts with other subjects 8 Hours.

- Arts and science
- Arts and language
- Arts and mathematics

Unit VI: Evaluation in arts 8 Hours

- Understanding the approach to art education
- Appreciation of work executed or performed in different media of expression
- Development of understanding on the basis of participation in different art-related activities and sample of art works and write-ups produced or spoken.

(c) Additional Specialization

Educational and Vocational Guidance

EACH individual's growth represents a range of problems and requirements at that stage. Students are characterised by a number of physical developmental needs at the secondary stage. Proper fulfilment of their needs can facilitate development of their personality. In pursuance of this objective, the National Policy on Education and the Programme of Action (1986) highlighted the child-centred approach to education which implies the importance of guidance.

The need for guidance can be looked at from two standpoints, viz., the standpoint of the individual and that of society. These needs can be broadly classified as given here -under:

1. *Academic and intellectual growth:* Development of potentialities and skills consistent with varying capacities and talents of the individual.
2. *Personal-social development :* Self understanding and proper adjustment to self and

society. Generally, there are three types of problems pertaining to orientation, adjustment and development involving the need for self appraisal and understanding.

3. *Vocational development :* Development of polytechnical skills, right attitude towards work and gathering career information. It involves the development of attitude, interest and skills which ultimately determine the occupation which an individual will choose for himself.

Social needs can be classified into the following three areas:

- (a) Guidance for better family life, i.e., right attitude towards home and understanding of relationships in fundamental, emotional ways.
- (b) Guidance for the conservation and proper utilization of human resources—need for organised vocational guidance service to meet

the dual responsibility of reconciling individual aspirations with social demands on the basis of free individual choice.

- (c) Guidance for good citizenship—appreciation and understanding of social values, needs, problems and issues together with developing social attitudes, habits, learning and imbibing of group manners, loyalties, social responsibilities and fair play, etc.

Role of Teacher

In order to meet the above stated needs of students at this stage, the following roles are visualised for teachers:

As the teacher is in a position to know the student closely, his participation in the guidance programme will help students to know themselves better.

The teacher has to be alert and sensitive to the needs of students who need guidance. These may include special needs of girls, need for self-confidence and need for development of motivation. Hence, identification of the students in need of guidance and help will be facilitated if the teachers sources of student referrals are adequate.

The teacher has also a central role to play in the school career information activities. The classroom teacher may incorporate career education into subject-matter teaching.

This work also includes the responsibility of the teacher to develop in pupils positive attitudes and respect for work.

The environment in the classroom is an important factor in raising the standards of achievement of students. A significant contribution that the classroom teacher can make to the school guidance programme is one of counsellor encouragement and support, and the creation of a motivating environment so that the pupils view positively and utilise the service of the school guidance programme.

Nature of Course

The curricula for the secondary teacher education programme has to develop an understanding of the basic philosophy of guidance, an awareness of developmental needs of students and cultivation of necessary skills for carrying out the above mentioned guidance functions and roles through the use of various techniques of group guidance, non testing devices and developing a proper attitude to work cooperatively with all those who are concerned with the multi-dimensional development of children's personality.

Objectives

1. To develop an adequate guidance point of view and understand basic concepts in relation to classroom teaching—learning process.
2. To develop an understanding of various procedures to be used in carrying out the simple guidance functions.
3. To develop an understanding of the nature and importance of the work and career development in human life.

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| <p>4. To acquaint with need and organisation of information service in guidance.</p> <p>5. To acquaint with the non-testing techniques of guidance.</p> <p>6. To acquaint with children having special needs.</p> | <p>7. To acquaint with the role and function of referral agencies.</p> <p>8. To acquaint with the latest data of various areas of work and jobs.</p> |
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Syllabus

Total Time

120 Hours

Unit 1: Introduction

- (a) Nature of guidance: basic concepts, principles and scope of guidance
- (b) Guidance as an integral part of education
- (c) Need for guidance and its goals
- (d) Guidance and classroom learning
- (e) Subject-related career guidance

Unit 2: Guidance procedures and techniques

- (a) Group guidance techniques: use of bulletin boards, class talks, career conference, career exhibitions, visits.
- (b) Non-testing techniques: observation, cumulative record cards, case study, student information bank, students problem, check list, anecdotal records, sociometric techniques

Unit 3: Nature of career development

- (a) Process of vocational development
- (b) Factors affecting career development
- (c) Place of information in career development
- (d) Employment trends and role of vocational guidance

Unit 4: Organisation of guidance services in school

- (a) Planning of a guidance programme in the school
- (b) Role of principal, teachers and parents in different patterns of guidance programme
- (c) Role of a career master and counsellor in guidance programme

Unit 5: Guidance of children with special needs : gifted, retarded, handicapped, slow learner, under-achiever

- (a) Needs of the children of special groups
- (b) Specific guidance activities to fulfil their needs and problems
- (c) Need of counselling the handicapped children, slow learners and learning disabled children
- (d) Need of counselling parents of the mentally handicapped children

Unit 6: Community agencies for referral purposes

- (a) National level — National Council of Educational Research and Training
— Directorate General of Employment and Training
- (b) State level — State Bureaus of Educational and Vocational Guidance
— Employment Exchanges
- (c) Local level — District Education Officer
— District Employment Exchange
— Social Welfare Agencies

Practical Activities

The teacher will choose at least five of the following practical activities:

1. Assessment of pupil's knowledge about occupations
2. Demonstration by the teacher educators of non-testing techniques of pupils appraisal such as administration of a student's problem, check list, writing of two good anecdotal records, filling of cumulative records of four types of pupils for a period of three months namely, bright, under-achiever, disadvantaged and first generation learner.
3. Development of vocational plans of a few students keeping in mind the academic record
4. Meeting some professionals and jotting down the job specification and analysing the job
5. Procuring newspaper clipping of employment notices, etc., and analysing them
6. Trips to employment bureau and study its functioning
7. Study job classification directories.

Population Education

POPULATION growth has become one of the most serious problems facing the world today. The magnitude of this problem and its seriousness is comparatively more visible in the third world countries. In India, it is estimated that by 2000 AD, the population will be more than 1000 million.

The unprecedented population growth in India accentuated a number of problems such as unemployment, poverty, disease, anti-social behaviour, environmental pollution, depletion of natural resources, etc. The continuance of these problems has resulted in the general deterioration of the quality of life. Efforts during the last 40 years to control the growth of population through various agencies have not yielded the expected results. Thus, population explosion is really a challenge to be faced in our country.

Our new generation must be made aware of the consequences of population explosion, and efforts should be made to develop in them the right attitudes so that they take a rational decision on population related issues when they are adults.

One of the effective ways to achieve this is by making population education an integral part of our education system. Thus, it becomes imperative that our teachers know about population situation and related issues. It is considered necessary to incorporate population education concepts in the curriculum for the secondary teacher training level in all its aspects such as educational pedagogy, content-cum-methodology and working with community.

Objectives

The objectives of population education for pre-service education at the secondary teacher education level are as follows:

- To develop an understanding of the importance of population education.
- Impact of population growth on various aspects of human life—physical and mental, social and cultural, moral and ethical, economic and political.

- The effect of unchecked growth of population on natural resources and environment.
- Aspect of human sexuality.
- Policies and programmes of India and some other countries.
- To appreciate the role of population education as an educational intervention providing social change and national reconstruction.

Skills

To develop the skill in:

- Collecting and interpreting data.
- Analysing and identifying the elements in school subjects relating to population education concepts.
- Using various audio-visual aids in imparting knowledge about various ideas and concepts of population education.

Attitudes

To develop positive attitude:

- Towards responsible and planned parenthood.
- For conservation of natural resources.
- To rationally analyse the blind beliefs relating to population growth.

Scheme of Evaluation

The scheme of continuous comprehensive evaluation will be developed to evaluate the achievement of teacher trainees. The total marks for evaluation will be 100. The distribution of marks will be as follows:

Theory : 75 marks
Practical : 25 marks

The knowledge in theory components will be evaluated with the help of question papers to be set externally. The practical work including field work such as community survey, etc., will be evaluated internally. Internal evaluation will be continuous and comprehensive in nature.

Methodology for Teacher Educators

Keeping in view the nature of the content and its relationship with other subject areas, the following strategies may be adopted:

1. Lecture-cum-discussion
2. Problem solving
3. Project method
4. Role play
5. Value clarification
6. Inquiry approach

A few other approaches may also be adopted depending upon the nature of resources available.

Syllabus

Total Time		120 Hours.		
Unit	Title	Methodology	Time allocation	
			Theory/Practical work	
			Hrs.	Hrs.
<i>I</i>	<i>Nature and scope of population education</i> Meaning, concept, need and importance of population education, objectives of population education	Lecture-cum-discussion	6	2
<i>II</i>	<i>Population situation and dynamics</i> Distribution and density: population composition, age, sex, rural - urban - world and India, factors affecting population growth, mortality and migration and other implications	Self-study Assignments	12	6
<i>III</i>	<i>Population and quality of life</i> Population in relation to: socio-economic development; health status, health services, nutrition, population environment, resources, education provision.	Lecture-cum-discussion	12	8
<i>IV</i>	<i>Family life education</i> Concept of family; concept of family life education, family roles and responsibilities, family needs and resources, effects of family size on the basic needs of members, responsible parenthood; values and beliefs.	Lecture-cum-discussion and observation	8	4
<i>V</i>	<i>Population related policies and programmes</i> Population policy, health policy, education policy, environment policy, programmes related to employment, role of different agencies and social movements; voluntary and international agencies like UNFPA, WHO, UNESCO, etc.	Lecture-cum discussion and self-study	6	4

<i>VI Curriculum for population education at various stages of school education</i>	Lecture-cum discussion	16	12
Its place in school curriculum, its objectives at different stages, its integration in school curriculum			
<i>VII Methods and approaches</i>			
(a) Integration approach in curriculum development	Lecture-cum-discussion	8	8
(b) Methodology of classroom teaching: values clarification and inquiry approach, observation, self-study, discussion, assignments			
(c) Use of media, organisation of activities			
(d) Working with community			
<i>VIII Role of teacher</i>		4	4
Teacher a catalytic agent for bringing about social change, for creating awareness of the consequences of population problem, inculcating new values and attitudes leading to modification of student behaviour			
	Total Hours	72	48

Practical Work

1. Content analysis of existing text-books to find out the components of population education.
2. Survey of population situation pertaining to a certain localities in respect of population dynamics, population profile and their impact on standard of living.
3. Survey of the localities inhabited by the disadvantaged sections of society such as slums, etc.
4. Community work in areas like mother care, child care, health and cleanliness, etc.
5. Creating community awareness about social evils such as superstitions, early marriages, etc.

6. Organisation of debates, discussions, seminars, symposia, quiz, competitions, drama, puppetry, drawing competition, exhibition of population related material, etc.
7. Arranging discussion with parents regarding population explosion and its control.
8. Organisation of population education clubs.
9. Critical study of work of any voluntary or governmental organisation engaged in population education.

Educational Technology

EDUCATIONAL technology plays a dominant role in proper planning and improving the quality of education. Recent explosion in the knowledge of communication technology, and the availability of a variety of resources for teaching and learning, gives the teacher scope for trying a variety of instructional strategies in the classroom. Educational technology which deals with effective planning and utilization of available human and non-human resources to maximize human learning, necessitates the introduction of those techniques and tools for the training of teachers at the secondary stage.

There has been a rapid growth in techniques for storage and retrieval of information, and the teacher should be exposed to modern technology in the designing and use of instructional systems appropriate to classroom situations. The teacher cannot remain a mere information giving instrument and his tasks should be supported and supplemented by appropriate use of available resources in men and materials. The National Policy on Education (1986) visualises an important role to educational technology to bring about qualitative

and quantitative improvement in education, and to provide equal educational opportunities to all sections of children irrespective of economic status, caste, creed and distance. In recent years, educational technology has not left any area in education untouched, and it finds extensive application in the fields of pre-school education, non-formal education, adult education, special education and distance education.

Introduction of educational technology as an optional paper in the B. Ed. courses, finds justification in view of the role of educational technology for effective, classroom instruction. With rapid explosion of population, and concomitant increase in the enrolment of students; and the enormous increase in the information to be taught at the secondary schools, there will be a demand for effective planning and appropriate utilisation of resource, both human and non-human.

Tasks of Teacher

- Designing and redesigning the instructional systems in terms of need and feedback.

- Identifying, generating and collecting resources and their mobilisation.
- Evaluating cost-benefit analysis of learning material.
- Diagnosing learning difficulties.
- Communicating with different sub-systems in a school system.
- Using media effectively.
- Motivating the members of the learning system.
- Trying out and implementing instructional innovations.
- Maintaining the material resources.
- Improving teaching with alternate strategies.
- Understand the different components of an instructional system.
- Acquire knowledge of steps of instructional system.
- Acquire knowledge of physical and human resources of an instructional system.
- Develop skill in preparing low cost support system.
- Understand how to monitor and modify instructional system according to the learning difficulties of pupils.
- Understand inter-relations between different components of instructional system and the outcome.
- Understand inter and intra variations between different modes of communication.

Objectives

The student teacher should be able to:

- Understand the concept and the scope of educational technology.
- Understand the basic components and principles of communication and factors influencing communication.
- Evaluate effectiveness of communication.
- Develop understanding of the concept of a system, system approach and its implications for instructional system designing.
- Develop skill of using different modes of communication (viz. symbolic, iconic and enactive).
- Acquire the basic skills of resource management.
- Keep abreast with different strategies of teaching-learning process.
- Keep abreast with the different innovations in educational technology and try them out for improving.
- Communicate the strengths of different in-

structional materials and orient other teachers in their uses.

- Evaluate the relative effectiveness of instructional material.

Rationale

There is an enormous growth in the availability of resources for teaching in recent years. A wide variety of audio-visual materials are available which are developed on the basis of the physical science principles, and the combination of principles of behavioural sciences and the sciences led to the origin of the concept of educational technology. The teacher who is exposed to educational technology, as an elective subject should be acquainted with the concept and scope of the educational technology and its role in the context of changing Indian educational system. The teacher should appreciate the impact of educational technology in the qualitative improvement of classroom teaching.

Communication is the basic ingredient in the learning process. To convey our purposes and to elicit responses, we communicate our messages in several ways and modes. Our further communication depends on the feedback we receive from the receivers. The classroom teacher who imparts knowledge to the pupils, endeavours to improve his communication to be meaningful and effective. As a communicator, he should understand the essential ingredients of communication process, the factors that influence effectiveness of communication. There is similarity in communication and learning and this aspect should be emphasized to

the teacher. The teacher should understand the need for different communication media and their utility in realising the educational goals.

Systems approach gives a direction for proper planning and management of instruction in the classroom. Systems approach is also management of all the available resources for effective classroom teaching. The teacher has to properly design his instructional strategy for the realisation of the educational objectives. The instructional design embraces the learner, the content, the teacher, and the resources as inputs. A proper analysis of the task, specifying the objectives, selection of the resources constitute the pre-instructional design. The appraisal of the performance of the learner in teaching of the objectives, gives the feedback for identifying gaps in the intended goals and searching for remedial strategies. The teacher should be able to understand the interaction between the different variables of the instructional system and to manage the ingredients for bringing about effective and optimum results.

The teacher education framework envisages a large number of additional specializations both at elementary and secondary level teacher education. These additional specializations suggested in the framework are not academic specializations but task related specializations. In view of this, the educational technology teacher has to perform certain special and distinct tasks and functions in schools and in small school units and perhaps, he would be the only person specialized in educational technology.

The role and functions of educational technology teachers are, however, not narrowly perceived

here—just as one in charge of educational technology audio-visual aids looking after their maintenance. We visualise a broader role for him. Educational technology teacher so far as this syllabus is concerned, has been basically looked upon as an instructional system designer. Instructional system design has been treated in the present syllabus as the core or central theme around which the remaining units have been organised.

Educational technology teacher in his main role as instructional system designer is expected to have thorough knowledge of basic concepts of systems approach, and their applications in instructional system designing (ISD). He should know the various sub systems of the instructional system, their components, the physical and human resources, the hardware and software, their inter-relationship and, above-all, their ultimate impact on the output of the system.

With this thorough knowledge of ISD, the educational technology teacher should be able to think and act in terms of ISD, within the constraints of the school and his own constraints as well. He should also be able to redesign, modify and evaluate the variable in the system in the light of the feedback he receives.

One of the major roles that the educational technology teacher has to perform is that of the change agent in the school. He is expected to be receptive to new innovations, materials and try out experiment with them. Through these attempts he should judge the strength and weakness of the different innovations and instructional materials in terms of cost, time, feasibility, etc. and ultimately

communicate and share his experiences with others effectively and constructively.

He should be able to demonstrate effectiveness of the use of educational technology, convince and motivate his colleagues, orient them in educational technology, techniques and use of material. It is hoped that by undertaking a variety of activity on co-operative basis such as joint project, workshop, demonstrative team teaching and so on, he would be performing the task of a change agent.

The teacher trainee in educational technology should not only be aware of different hardware, but also must know how to use them effectively. Practice in the use of overhead project, projector slides epidiascope, film projector, radio, television, video and computer is a must. Further, they must know how to maintain these equipments to get the maximum benefit of all.

Knowledge of hardware is useless unless the teacher knows how to utilise the software namely, slide, filmstrips, transparencies, etc.

Since teachers are to be trained in a developing country like India, many of the hardware and software mentioned above may not be available easily, therefore, we need to train teachers to produce low cost teaching material. Unless they are convinced of the need and importance of low cost support system, they will not be able to prepare these. Apart from theoretical inputs, we need some practical demonstration in workshops where they can learn and develop low cost teaching materials.

The teacher trainees must know how to use the media effectively. The teacher must know the

psychology of the learner and the teaching-learning process. Keeping this in view, they have to select different media and use them. Now even it is important to know the effectiveness of different media. Hence, the teacher has to constantly evaluate and modify the techniques according to their needs.

A teacher's role is becoming more complex and varied in nature. Several persons have to be identified and trained for managing and executing instructional systems. Teaching has become a team work now and team should consist of persons with different skills. They may be available in the system or they may be identified and prepared. Hence, there is need for focussing on strategy of human resource identification and development.

Since the teachers trained in educational technology are expected to play the role of change agent and motivate other teachers to make use of technology in the classroom, he or she is expected

to procure and maintain the necessary equipments to the teachers of the school. He/she has to act as a manager of technological resources for teaching learning process. Singlehanded he/she may not be able to operate the resources simultaneously for all the teachers. It is necessary on his/her part to prepare operational manuals for the teachers to use.

Teaching-strategy cannot be the same in all situations. The function of different types of teaching strategies are to create the appropriate learning conditions in which the learning may take place. Different types of learning demand different teaching strategies. Hence, innovations in educational technology will have to be brought about, in view of the instructional objectives, content, learner characteristics and their entering behaviour. A secondary school teacher should, therefore, understand the innovations in the field of educational technology. He is not only expected to know the recent strategies of teaching but also be able to try them out and finally use the same as per requirements.

Syllabus

Unit 1: Concept of educational technology

Total time 20 Hours

- Meaning
- Nature
- Functions
- Scope
- Significance of educational technology

Unit 2: Communication process

- (a) General theory of communication
 - Concept

- Nature
 - Process
 - Principles
 - Components
 - Types
 - Barriers
 - Modes
- (b) Classroom communication
- Basic concepts
 - Classroom interaction, verbal and non-verbal interaction, interaction patterns, etc.
- (c) Effective classroom communication
- Concept
 - Criteria
 - Tools of evaluation

Unit 3: Systems approach

- Concept of a system
- Systems approach
- Systems analysis
- Implications for teaching-learning process

Unit 4: Instructional system designing

- Concept
- Component : physical resources (hardware/software and human resources)
- Their inter-relationships
- Steps of designing an instructional system

Unit 5: Physical resources of an instructional system

- (a) Classifications — Projected/non projected, hardware/software
- (b) Hardwares — Chalkboard, tape recorder, TV videoscope, instant slide maker, overhead projector, film strip, slide projector, ep-idiascope, interactive video computer, transparency maker, reprographic equipments, computers

- (c) Softwares — Scripts, slides, programmes, learning materials, film-strips, transparencies, newspapers, textbooks, charts, maps, models, pictures, computer programmes
- (d) Low-cost support system
 - Concept
 - Need
 - Significance
 - Illustrations and techniques of preparation

Unit 6: Use of different media

- (a) Principles of using different media (including mass media and other media)
- (b) Processes : Selection
 - Preparation and planning
 - Execution
 - Evaluation
- (c) Integrating these with the classroom teaching

Unit 7: Human resources of an instructional system

- Identification of human resources within the school system and outside the school system
- Strategies for developing the following:
 - Expertise, competencies and teaching, allied skills required (micro-teaching and other skill-based techniques of skill acquisition)
 - Strategies and models of teaching

Unit 8: Management of physical resources

- Sources of different material/ gadgets/hardware
- Care and maintenance
- Scheduling
- Preparing operational instruction manual for gadgets
- Lay out of educational technology laboratory or audio-visual aids

Unit 9: Innovations in educational technology

- (a) — Concept

- Significance
- Try-out strategies of an innovation, action research
- (b) Recent innovations
 - T V and video lessons
 - Computer assisted learning
 - Interactive video
 - Multimedia package
 - Language laboratory

Unit 10: Educational technology—teacher as a change agent

- (a) Identifying strengths and weaknesses of instructional material
- (b) Determining relative effectiveness of instructional material
- (c) Sharing the experiences with others in the system
- (d) Strategies of communicating, orienting, motivating others, workshop demonstration, team teaching

Practicum

Any three of the following activities may be undertaken:

- (i) Tutorial/term paper/symposium
- (ii) Developing software — transparencies/ programmes learning material/ slides/ scripts/ scenarios
- (iii) Developing self instructional material/ support system/learning package, multimedia package or any unit
- (iv) Workshop on handling hardware
- (v) Preparation of low cost/improvised material
- (vi) Conducting a lesson incorporating radio/TV/video, computer/language laboratory and its evaluation
- (vii) Visit to educational technology laboratory/AV hall and its reporting.

(d) Practicum/Field Work

School Experience Programme (SEP)

SEP is considered to be a very important 'practical' phase in student teacher's preparation for 'regular' teaching at any level of school education. SEP is also regarded as the only/single 'activity programme' in teacher education through which a student teacher is helped to develop awareness, understanding and knowledge of the best ways in establishing a linkage of a cordial nature between home, school and community for enriching the life of the secondary school pupils. It also enables the student teachers to apply and verify for themselves the practicability of the theoretical knowledge of foundation courses, content of various academic subjects, methods and techniques of curriculum transaction and evaluation, class and school management in actual school situations.

In the following pages, guidelines have been prepared to give some orientation to SEP as a whole and to answer some significant queries often raised by those who are involved with student teachers in this programme. In presenting the guidelines, the following aspects of SEP have been taken into consideration:

- I. Its connotation
- II. Need for such a programme
- III. Objectives of the programme
- IV. Guidelines for organising the programme
- V. Organisation of activities and their supervision
- VI. Evaluation
- VII. Follow-up programme

Connotation of SEP

The term "School Experience Programme" has been used in a wider context and should be interpreted accordingly. Earlier, the school experience programme was limited only to 'practice teaching' done by student teachers. Its scope was observation of a few demonstration lessons taught by teacher educators and senior school teachers, practice lessons taught by other student teachers, development of lesson plans and teaching aids and classroom teaching. Practice teaching was assumed as a programme and responsibility of teacher training institutions alone. Sharing of this responsibility with the school faculty was almost

absent. Gradually, emphasis began to be laid on the partnership nature of this responsibility between the teacher training institutions and practising/cooperating schools for providing relevant experiences to student teachers to enhance their capabilities for better classroom teaching. Although, student teaching sought to encompass within its fold certain other aspects of teacher functions, its focus for a long time continued to be only on classroom teaching. The term SEP emphasizes that besides classroom teaching responsibilities, prospective teachers under training need to know, exercise and learn how to play their other roles outside the class and within the school in order to give them a broader vision and perspective of their roles and functions in the total school programme. This stress lays greater importance on the student teachers being attached to certain school teachers for a specific period of time and actively participate in organising all kinds of school activities (in which the student teachers have more interest and greater ability) involving different groups of children and various school teachers and sometimes community resource persons, if need be.

In the new teacher education curriculum, SEP is considered, essentially, a learning process which provides an opportunity and a challenge to the student teachers to apply the knowledge of various subjects, principles and techniques of teaching, characteristics of children from varied cultural backgrounds in real life situations of the classroom, school and community that the school serves. SEP has two very significant parts: planning of student teaching and planning of school activities closely linked with student teaching.

Need for such a Programme

The main concerns in chalking out school experience programme are to:

- (i) View this programme as an integral part of the entire design of teacher education curriculum rather than a separate entity, as there is always a tendency to overlook this aspect.
- (ii) Give a 'forward looking' approach keeping in mind the new educational needs of a secondary school in our changing society.
- (iii) Make the programme relevant and adequate, examining the peculiar local needs and constraints existing in secondary schools to provide for alternative organisational models, if needed.
- (iv) Examine and use the programme to enrich the theories of secondary teacher education in Indian context of multi-lingual, multi-religious and multi-ethnic communities.
- (v) Understand through this programme the linkage between home, school and the community in order to enrich the life of a secondary school pupil.
- (vi) Plan out a built-in machinery for comprehensive and continuous evaluation of student teachers and monitoring of the programme itself.

Objectives of SEP

A. General Objectives

SEP, in teacher education, will enable the student teachers to:

1. Acquaint themselves with the conditions under which they are normally required to work, the problems teachers generally face in the real school situations, and the possible ways and means of dealing with them.
2. Get support of different human relationships that exist in school for successfully planning and executing the assigned school work.
3. Develop skills to make self evaluation having three dimensions of effectiveness; (a) in handling the subject matter, (b) in dealing with individual pupils or groups of pupils and (c) in enhancing their professional growth.
7. Acquire skills of diagnosis and remediation.
8. Develop different evaluative tools and devices, make use of them in school, analyse the data and interpret their results for improving teaching-learning process.

Guidelines for Organising SEP.

Twenty per cent of the total time, i.e. 240 hours should be allocated to the SEP. The available time may be allocated to various activities spread over the academic year. This assumption has been taken into consideration while preparing the guidelines which are as follows:

B. Specific Objectives

1. Plan and implement the instructional programmes systematically in logical and psychological sequence.
2. Plan and prepare lessons of different subjects required to be taught.
3. Select, procure, prepare, improvise and use learning materials and teaching aids.
4. Try-out different teaching styles and approaches.
5. Proper use of communication media (print and non-print) in a variety of situations.
6. Develop skills in identifying children having special needs, and understanding their behaviour.
1. The student teachers having graduate and post-graduate degrees, are to be provided experience of teaching in two secondary school subjects. In 'Teacher Education Curriculum Framework' (1988), however, two alternative strategies have been suggested for graduates and post-graduate student teachers in B.Ed. programme. Some graduates may be interested in working with younger children, their employment chances and career opportunities may also demand that they be proficient in primary education. State Education Departments, too, employ a large number of trained graduates to teach in primary schools and to function as heads of such schools or to work as primary teacher educators/subject supervisors/inspectors at that level. Such graduates should be allowed to opt for specialization in teaching at primary stage in lieu of one secondary level subject.

Similarly, a considerable number of Master degree holders, especially in school/college subjects, would find employment as senior secondary

teachers/secondary teacher educators, etc. Such Master degree holders should be allowed to specialize in the teaching of the major specialization at the secondary and the senior secondary levels. Hence, 50 per cent of the school experience programme may be organised at the primary/senior secondary level along with secondary level for such student teachers.

2. The student teachers who opt for specialization in teaching at primary stage should be provided experience of teaching all the curricular areas and also conducting all other activities related to that stage besides teaching at the secondary stage. They should also learn teaching techniques to be used for multiple class teaching. The student teachers who opt for specialization in teaching at senior secondary stage, should be given exposure of teaching at secondary and +2 stages.

3. The student teachers should be provided opportunity to have practice in various types of observational techniques to know and understand the pupil in different school situations and have mastery of at least two techniques of teaching namely, discovery method and inductive approach to teaching which may help them to develop initiative and creativity in teaching style.

4. The student teacher should also be given further opportunity to deal with different types of children in small groups, having special needs and coming from weaker sections of the society. They should also receive guidance in organising school practical work related to teaching of such children.

5. It should be the prime concern of the teacher

training institute to supervise student teachers with the help of teachers of the cooperating schools. They should continuously give guidance and feedback to student teachers for improving their performance in the school.

6. It is suggested that wherever possible, 100 per cent internal evaluation should be followed. But, where constraints exist, 75 per cent of weightage may be provided for internal evaluation and 25 per cent for external evaluation. The external evaluation may preferably be done by a panel which should include at least one internal examiner.

7. The student teachers should be given opportunity for self-evaluation of their performance.

8. The school experience programme should be continuously evaluated keeping all aspects into view. It should not only include the classroom teaching but also the participation in and organisation of activities in the school by the student teachers. Also, some written assignments or reports based on their visits to different places and observation of various aspects of school environment should be evaluated.

9. It is desirable that structured tools for evaluation of different activities like observation of lessons, supervision of teaching and various other activities conducted by student teachers should be developed and used.

10. The supervisory staff should not only support, guide and evaluate the student teachers but also assist them in utilizing community resources and in gaining confidence in handling the pupils and subject matter.

Organisation of Activities

First, in organising the SEP, the allocation of time for different activities and spreading them out through the academic year are necessary. Secondly, the planning and organisation of this programme should be done in a democratic way, seeking the help of school teachers, student teachers and teacher educators. Thirdly, this organisation of SEP should be viewed as a part of the institutional planning of the school.

Organisation of various activities under SEP can be classified under two heads:

- (a) Orientation/readiness activities
- (b) Actual SEP activities

(a) *Orientation/Readiness Activities*

The main purpose of organising the activities under the orientation/readiness programme is to make the student teachers understand the pupils whom they are supposed to teach, the different teaching skills to be followed for secondary stage and to understand the school environment in which they have to work. The time to be allocated for readiness activities should not be less than four weeks including preparation of lesson plans, practice of core teaching skills and observation of various school activities.

The suggested readiness activities for the SEP may include the following:

- Visit to schools to study the school environment and pupils, to observe teachers at work and various activities, such as, art, music,

physical and games activities. Observation skills may be developed in student teachers by giving them observation schedule which may indicate what, how, when and why to observe and also to write a concise report of observation.

- Visit to various other places of interest, such as:
 - (a) Rural craft centres, farms, cottage industries, etc.
 - (b) Juvenile courts, remand homes, etc. in urban areas.
 - (c) Special schools for the handicapped
- Collect statistical data of pupils coming from different socio-economic and cultural backgrounds; interpret the results and write reports.
- Observe lessons of teacher educators and good teachers of cooperating schools.
- Hold meetings with the teachers who have conducted innovative activities.
- Prepare lesson plans.
- Practise core-teaching skills in simulated conditions.

It is advisable to evaluate the student teachers in this programme. Evaluation should be done on two different kinds of activities: (a) planning for teaching and observation, and (b) observation report. Under planning for teaching, will fall micro-teaching and simulated exercises. Observation report may be on teaching by teacher educators and good teachers in the school as well as on visits to various places.

(b) Actual SEP Activities

It is expected that the student teachers should have at least four weeks of actual SEP in which they will do teaching in the classroom as well as conduct school practical work related to their teaching. As stated earlier, every student teacher is to teach two subjects at the secondary stage. However, those who opt specialization in teaching at primary or senior secondary stage, would devote 50 per cent of the time at secondary stage and 50 per cent at the stage opted for.

The student teachers should also be given opportunity to observe peer teaching, organise and participate in co-curricular activities and community contact programmes. The community contact is established for doing community service as well as utilising community resources for school improvement programme.

The following list of activities can be suggested for the actual SEP:

1. Study school plant
2. Plan games (supervised play)
3. Prepare instructional materials, such as art material using paints and clay, charts, tables, bulletin boards, etc.
4. Prepare resource materials for a unit lesson, such as:
 - (i) Content information
 - (ii) Supplementary readings and other aids,
 - (iii) Pictures, maps and other display materials

5. Assist in field trips/excursions.
6. Participate in school-community projects.
7. Do clerical work to help administration in handling student record, teacher made tests, anecdotal record, supply orders, etc.
8. Participate in curriculum enrichment programme (tell stories, read poems, teach a folk song/dance/play, discuss current events, etc.)

Supervision and guidance are to be provided continuously to the student teachers with a view to improve their teaching skills and other organisational abilities.

Evaluation

Evaluation has twin purposes of reinforcing learning and certification. Then, it has to satisfy the standard criteria of validity, objectivity and reliability. Therefore, in the guidelines (item No. 6) provision of 75 per cent internal and 25 per cent external evaluation is indicated. However, it would be desirable to move towards 100 per cent internal evaluation.

Evaluation of SEP will mainly be of the actual SEP and related activities of the trainee in the cooperating school. But, certain things will simultaneously be done at the teacher education college level to reinforce and supplement such experiences, e.g. lesson planning, practice of teaching skills under simulated conditions, preparation of teaching aids, resource materials, preparation of reports/assignments on school visits, etc. A tentative break-up of SEP is suggested below.

I	Preparation of teaching aids and resource materials	15 per cent
II(a)	Reports on school environment and visits	10 per cent
(b)	Study of pupils	
III(a)	Micro teaching in simulated conditions before and during SEP	15 per cent
(b)	Planning of lessons	
IV	Actual SEP - student teaching, observation of lessons and organisation of school activities.	60 per cent

In evaluation, credit should be given if student teachers have carried out any innovative practice(s) in teaching, preparation of teaching aids or dealing with pupils, parents and other community resources.

The above scheme of evaluation is not prescriptive so also the weightage in terms of percentages. One can adopt according to the needs of the specific programme.

Follow-up Programme

In order to make SEP successful, a follow-up programme is a must as it serves the following two purposes:

- (i) To review the entire programme by identifying its strengths and weaknesses, by finding out ways and means or removing bottlenecks/constraints that stand in the way of progress and by locating new directions for improvement.
- (ii) To examine the nature and extent of student-teacher development in the areas of employable skills of a teacher.

In this programme, evaluation may take place at the completion of SEP with the help of supervisors of the training college, teachers of co-operating schools and the student teachers. Two approaches may be followed to evaluate the entire programme. One follow-up approach can be carried out with the help of a checklist and the other by conducting one or two seminars at the end of the training.

PRACTICAL WORK INCLUDING WORKING WITH COMMUNITY AND SOCIAL SERVICE

Practicum constitutes an important component of any programme of professional preparation. The major purpose of the component is to develop such skills and competencies in the trainees as they will be called upon to demonstrate in their occupation after completing the training. Acquisition of the skills and competencies will equip them to discharge the responsibilities of the profession with confidence.

Theory and practice in any profession are inter-linked. Practice or practical work contributes to strengthen the understanding of theoretical aspects of the profession. As the major function of a teacher is to teach in the classroom, the bulk of practical work in teacher training institutions will obviously relate to teaching practice. This justifies the allocation of 25 per cent time to this aspect of professional preparation. However, teaching is not the only task that the prospective teacher will be called upon to perform. Since the goal of education is to ensure balanced development of the child's personality, it can not be achieved through 'teaching' alone. Therefore, he will have to perform a number of other functions also, such as, organisation of co-curricular activities, preparation of teaching aids, etc. Keeping in view the need for preparing the teacher to perform 'other' functions, 15% of time has been proposed for practicum other than the teaching practice.

In a teacher education programme, practical work is required in the foundation courses as well as in teaching subjects. But, there are some practical activities which are essential for the preparation of a teacher but are not related with any theory course. The activities will relate work with community service.

The following are examples of such activities:

1. Adult literacy (imparting functional literacy to at least two illiterate adults)—
2. Non-formal education (educating at least two drop-out children and enabling them to re-enter a formal school).
3. Educational survey of a slum area or a neighbouring village
4. Case study of a child
5. Sociometric study
6. Study of socio-emotional climate of a classroom
7. Preparation of items for wall magazines.

The component of work experience is presented under the additional specialization section.

Work Experience

THE National Policy on Education (1986) reiterated the concept of Socially Useful Productive Work and renamed it as Work Experience (WE). In this context, it laid down the following as policy statement:

“Work Experience, viewed as purposive and meaningful manual work, organised as an integral part of the learning process and resulting in either goods or services useful to the community, is considered as an essential component at all stages of education, to be provided through well-structured and graded programmes”.

Keeping in view the importance of the area, the NCERT document, ‘National Curriculum for Primary and Secondary Education - A Framework’ with regard to the teachers role in implementing the WE curriculum in school has stated:

“Although it is expected that all teachers should work as work experience teachers, a large number of activities may require specialised personnel. The involvement of all teachers in this programme

would logically imply their proper orientation and training in this area”. Since WE is a part of the core curriculum at the school stage, it should also find an important place in the core areas of pre-service teacher education.

Rationale

Work education has, by and large, been a component of pre-service teacher education. In view of the stipulation of the National Curriculum that all teachers should teach WE, it is very essential that teachers acquire enough competence for planning, organising, performing and evaluating WE laid down for school children.

The prospective teacher is, therefore, expected to have the requisite knowledge and understanding about the subject along with necessary skills to perform WE activities at the same time exhibiting positive attitude towards the subject.

Objectives

The work experience programme in secondary teacher education institution is to be viewed at two

levels: the level of the teacher training institute and the school level. Although, the student teacher is to be prepared ultimately for teaching work experience in school, he is also to be trained as willing, efficient and knowledgeable worker himself. Unless he develops positive attitude towards manual and productive work and necessary skills for undertaking the same, he will not be able to teach the school children. Also a purposive, meaningful and interesting programme of work experience is needed which suits the cognitive and psychomotor level of the teacher trainee, his age and maturity. Hence, imparting much higher knowledge and skills to the teachers is needed. The teacher should, therefore, be helped to develop understanding, skills, abilities as following:

Knowledge

The pupil teacher should have:

- Knowledge regarding need, concept, philosophy of work experience and its curriculum at the school stage
- Knowledge about his own role in imparting the work experience
- Knowledge of pedagogical principles while teaching work experience
- Ability to relate knowledge of other subjects while teaching work experience
- Knowledge of productive activities in the community
- Understanding of the technical and social aspects of work situations in the environment

- Awareness of his own needs and problems and thoughts of the community.

Skills

The pupil teacher should have following skills/abilities:

- Skills for productive work by manipulation of raw material and tools
- Ability for solving the day to day problems in a scientific way
- Ability to prepare instructional material
- Ability to demonstrate the process involved in work experience activities
- Ability to identify the work experience activities for the children
- Ability to interact with the community
- Skills for the selection, procurement, storage and use of tools and materials for different activities
- Skills for preparing the annual plan of work experience, its management in terms of time, space and marking
- Skills in preparing the budget for work experience and maintaining its accounts.
- Skills for teaching the subject of work experience

— Ability for innovation and action research.

— Positive attitude towards self-reliance and good work habits

Attitude

The pupil teacher should have:

— Spirit of cooperation, team work, tolerance, sympathy and productive efficiency

— A deep concern for the environment and a sense of belongingness, responsibility and commitment to the society.

Syllabus

The syllabus of work experience may be comprised of theory as well as activities. The theory course in the area of work experience may include the following units:

THEORY COURSE

Unit 1: Concept, need and importance of work experience at school stage. WE in a retrospective review.

Unit 2: Aims and objective of work experience at the secondary school stage.

Unit 3: Different areas of work experience, types of work experience activities, criteria and basis for the selection of activities and suggested work experience activities at secondary school stage.

Unit 4: Planning and organisation of work experience.

- Annual plan, monthly plan, weekly plan and daily time table.
- Timing, place, grouping of students.
- Tool and experiment planning.
- Financial and administrative aspects of planning.
- Disposal of work experience products.

Unit 5: Methodology of teaching work experience, integrated approach, problem solving, experimentation, observation, demonstration, visits and project method and lesson planning in work experience.

Unit 6: Involvement of community in work experience programme and use of community resources.

Unit 7: Evaluation of pupils in the area of work experience:

- Continuous comprehensive evaluation.
- Weightages to different learning outcome.
- Process and product evaluation.
- Tools and techniques of evaluation.
- Internal and external evaluation.
- Making grading.

Unit 8: Role of the teacher in work experience.**Suggested Essential WE Activities**

Actual selection of activities/project depends upon the availability of natural, physical and human resources in the locality and the socio-economic background of the particular institution. However, a great deal of commonality is possible in some work experience activities which need to be performed by all pupil-teachers as they help in the formation of proper attitudinal changes, moreover, they are life skills and will help in solving their day to day problems.

Following is the list of essential activities:

- (a) Looking after environmental sanitation programmes, such as removal of garbage, digging of drains and clearing of unwanted vegetation.
- (b) Giving first aid for cuts and wounds, muscular or bone injuries.
- (c) Cleaning the classroom and the institution including the garden, playground, etc.
- (d) Maintenance of the institutional building, playground, water and electrical fittings.

(e) Decoration of the institution on special occasions.

(f) Tree plantation.

(g) Community service

Looking after sanitary disposal, helping the adult literacy/universalization of elementary education programme, road repair, helping voluntary organisation in their work.

Suggestive Elective WE Activities

The skills and competency acquired by the teacher trainee under elective activities will preferably be used by them while dealing with work experience in general. The programmes of elective activities is aimed at the learning and mastery of work skills and habits by the pupil teachers.

The activities may be put in such a sequence that they assume the form of a project to be completed over a given span of time. Keeping in view the available resources in the teacher training institution and of the community, the institution can prepare its own list of activities. A pupil teacher may be

advised to offer any one activity keeping in view his own interest and area of specialization. Following are the suggested activities:

- (a) Electronics
- (b) Photography
- (c) Cookery skills
- (d) Doll making
- (e) Food preservation
- (f) Repair of simple domestic appliances
- (g) Projects related to conservation of energy (sun, wind), etc.
- (h) Plumbing
 - (i) Preparation of certain useful items like detergents, shampoos, phenyl, chalk, candle, etc.
 - (j) Raising ornamental plants in pots
 - (k) Growing medicinal plants
 - (l) Kitchen gardening
- (m) Preparing plants through vegetative propagation
- (n) Running a book-bank
- (o) Cooperative management of college canteen

Teaching—learning Process

The teaching learning process in WE has three phases; study of the world of work through observation and inquiry, experimentation with materials, tools, preparing for actual participation in productive work and services, and the third may lead to production. During the work, practical for production activities, demonstration practice, reinforced feedback and repractice should continue till the pupil teacher gets mastery in the work skill.

In order to realise the educational objectives of WE, it is necessary to follow the problem solving

approach. Pupil teachers should be made aware of the problems related to their needs and the work that should be undertaken to satisfy those needs. They should be led to arrive at the solution of these problems by discussing the material, tools and techniques for performing work and services and by undertaking appropriate work.

WE should not be performed mechanically, and must include planning, analysis and detailed preparation at every stage, so that it is educational in character. Improved tools and modern techniques should be adopted in the performance of WE activities so that it leads to the understanding of a progressive society based on technology.

Evaluation Criteria

The entire evaluation in the area of WE should be a continuous process. The evaluation of WE activities should be both internal as well as external. In the internal evaluation, the teacher educator should record the performance of the student teacher on his performance report. It is expected that in the evaluation of student-teacher's performance, paramount importance should be given to attitudinal and skill development.

It should be remembered that WE is predominantly a doing subject, and therefore, actual work experience should receive maximum attention. In the attitudinal development, factors like dignity of labour, respect for work and workers, social commitment, discipline and co-operation should be taken care of. While evaluating the skill part of the student teacher, factors such as selection of material, tools, proper use of tool techniques adopted,

accuracy and finish should be judged. During the activities of social service, the factors like democratic attitude, leadership, participation in the group activities, organisation of work, etc. should be taken care of. Weightage in terms of work can be suggested in the following:

Total marks allotted to WE	= 100 marks
Theory	= 30 marks
Work practice	= 70 marks

In the work practice portion—

Internal assessment	= 35 marks
External assessment	= 35 marks

For internal assessment, a well-designed plan of continuous comprehensive evaluation using worthwhile evaluative criteria should be prepared. The student teacher should be asked to write the detail report of the activities completed and preserve the final product if it is non-perishable. Assessment may be made and recorded after every operational stages of activity/project. Teacher trainees self evaluation records should also be maintained.

Guidelines for Formulation of Curriculum

School curriculum has undergone several changes during recent past, so is true for work experience. The NPE 1986 has emphasised the need for restructuring the pre-service teacher education curriculum at all stages. It has considered WE as an integral part of the school curriculum and accorded to it the status of an independent subject. WE is in many ways different from other academic subjects, and therefore, needs an innovative treatment for the de-

velopment of its curriculum which should result into qualitative transformation of the various structure of teacher education. Keeping this in view, the following guidelines are suggested for formulation or adaptation of the curriculum in WE for its implementation at secondary teacher education level.

Planning

Planning for the Work Experience programme at teacher education level should be a decentralized process. The content of WE programme is to be based on the needs of the pupil teachers on one hand and the resources available in the community and the facilities available in the institution on the other hand. Since these will differ from place to place, no fixed programme can be prescribed for all the institutions in an area.

The syllabus developed by the university should be elaborated into detailed syllabus at the local level.

Selection of Activities

The WE programme centres around six areas of human needs—namely food, health and hygiene, clothing, shelter, culture and recreation and social service which should form the core programme for the teacher education curriculum.

A variety of activities should be provided as far as possible so that the pupil teacher is exposed to large number of activities which may help him to teach the core activities in the curriculum. So far, elective activities leading to prevocational course are concerned, they should be provided on the basis

of pupil teachers academic background at graduate/post-graduate levels. For example, a pupil teacher having science background may be provided elective activities from the science area while the commerce background prospective teacher should be exposed to the elective activities based on trade and business.

The curriculum should also include three phases of WE namely exploration, experimentation and the work practice. Besides, a balanced distribution of activities over the three dimensions of WE i.e. life skills, production and community service should be kept in view.

The purpose of essential activities is to bring about attitudinal changes and to develop readiness for continued productive work. The purpose of elective programmes is to give a vocational bias to the WE programme. It may, therefore, require repetition or constant practice according to the time available.

Allocation of Time

According to the NCTE document, 5 per cent of the time will be given to all WE activities; that means 60 hours for secondary teacher education course. Fifteen hours may be given to the theory and 45 hours may be given to the work practice. From the 40 per cent of the total time substantial time may be given to lesson planning, teaching practice and social service.

Use of Community Resources

Student teachers should be able to involve the community effectively. They should have the knowl-

edge of the available community resources. During their pre-service teacher education programme such types of activities will have to be chosen by which they get the real experience of the society. Therefore, the pupil teacher should perform many work experience activities in the community itself.

Theory

Seeing towards the nature of the course and background of the student entering the pre-service teacher education institutions, it is very necessary that the theoretical course in the area of WE be introduced. Through the knowledge and understanding of the area, the prospective teachers will be getting the awareness of the subject and it will help in effective implementation of WE programme at school stage.

Practice Teaching in WE Area

The WE component of the teacher education programme will remain incomplete without practice teaching in this area, because all the teaching-learning pertaining to this area is geared to application of the pedagogical principles during class teaching. Therefore, the student teacher should be provided with the opportunity of applying these principles in classroom practice teaching under the supervision of their teacher educators.

Preparation of lesson plans, procurement of raw materials, tools and teaching aids, practising various skills in simulated situation, observation of model lesson delivered by teacher educator, etc. are the essentials of pre-practice teaching preparation. While the essentials of teaching practice may be, preparing the learner for practical work, demon-

strating the new processes, supervising the work of learner, guiding them and evaluating their process of work and the product of their work. The post-practice teaching follow-up will include self-evaluation by the pupil teacher and discussion on the evaluation by the student teachers and discussion on the evaluation done by supervisors.

Specific Points for Implementation

1. There is need to provide a definite structure for WE in the teacher training institution. Physical, human and financial facilities should be provided for its successful implementation. Also, there should be a provision for the appointment of part time expert in the specialized areas. Teacher educators should be oriented in this area.
2. The WE subject is not to be considered in isolation for its successful implementation. It has to be a joint work with training institution and community. Camp for five to seven days may be organised which will help in the intensive training in the area of WE for pupil teachers.
3. Due weightage be given to this subject in the scheme of evaluation in the total teacher training programme.
4. The problem solving approach and the integration of knowledge relating to different subject areas with WE demands a new type of instructional materials for the guidance of the teacher educators. Teacher's handbooks and source book on activities of projects is necessary. The instructional materials will be developed according to the needs of the programme of that area.

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