# **DEIEd Scholar**

## Part-I

#### Edited by

Educational Research Development & Review Committee (ERDRC)



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#### **Syllabus**

#### CC-01: CHILD STUDIES

#### **Unit-1:** Perspectives in Development

**Class-8 Hours** 

- Introduction to perspectives in development Concept of development (meaning, principles and objectives).
- Development as multidimensional and plural
- Development through the life span (stages)
- Developmental ways as continuous and discontinuous.
- Childhood as modern construct (knowledge- creator) in the context of poverty, globalization and modern culture
- · Commonalities and diversities within the notion of childhood with reference to Indian context

#### Unit-2: Physical-Motor Development

Class-7 Hours

- Growth and Maturation
- Gross and fine motor development skills in infancy, pre-school children and elementary children
- Role of parents and teachers in providing opportunities for physical-motor development, for example, play.

#### **Unit-3:** Social Development

**Class-10 Hours** 

- Concept of socialization: Family environment, Parent-child relationships, Child rearing practices
- Separation of parents: Children in creches, orphanages etc.
- Schooling: peer influences, Teacher-child relationships, out of school experiences
- Development of children through socialization process
- Personality development—Freudian stages of development
- Psycho-social development—stages as proposed by Erikson
- Social theories and Gender development-meaning of gender roles, influences of gender roles, stereotypes and gender in playground

#### **Unit-4:** Self and Moral Development

**Class-7 Hours** 

- A sense of self: Self-description, self-concept, self-esteem, social comparison, internalization and self-control
- Moral development: perspectives of Lawrence Kohlberg

#### Unit-5: Emotional Development

Class-8 Hours

- Development of emotions and ability to regulate them (Love, affection, fear, anger, jealousy etc.)
- Development of emotions at different stages (pre-school, late childhood and pubertal stages)
- Development of emotions as continuous and discontinuous

#### Unit-6: Learning

**Class-9 Hours** 

- Learning: Concept of learning (meaning, principles and objectives) basic theories of learning
- Learning: ideas of behaviorism
- Basic architecture of the mind (working memory, long term memory, attention, encoding and retrieval)

#### **Unit-7:** Cognition

Class-11 Hours

- Constructivism: introduction to the concept, Piaget's theory: what is learning, structures and processes of cognitive development, children's thinking, and implications for teaching learning.
- Vygotsky's theory—introduction, the general genetic law, concept of zone of proximal development tools and symbols in development, implications for teaching.
- Individual and socio-cultural differences in cognition understanding learning difficulties, terms of exclusion and inclusion and impact.

Unit-8: *Play* 

**Class-10 Hours** 

- Meaning of Play: Characteristics, kinds and types of Play
- Functions of Play: Linkages with the physical, social, emotional, language, cognitive and motor development of children
- Cross Cultural & Socio-Economic differences in children's play
- Games and group dynamics, rules of games and how children learn to negotiate differences and resolve conflict.

#### Unit-9: Language

**Class-10 Hours** 

- Perspectives in Language development (with reference to how children acquire language at early age): Skinner, Social Learning Theory of Bandura and Walters
- The use of Language: Turn taking, interaction, conversations and listening
- Bilingual or Multilingual children: Implications for teachers, multilingual classrooms, storytelling as a pedagogic tool

#### **Unit-10: Communication**

Class-10 Hours

- How do children communicate?
- Socio-cultural variations in Language: Accents, difference in communication for a multilingual classroom.

#### **CPS-02: ENGLISH**

#### Unit-1: Issues of Teaching English in the Elementary Level in India

- Concept of first, second and foreign language—a historical view of English as a second language (ESL) in India
- Importance of English in the multilingual context in India—English as a link language-for national and international link, English as a library language
- Language acquisition and Language Learning—concept, difference between acquisition and learning stages of
  acquisition, factors influencing language acquisition, importance of an acquisition-rich environment, perspectives
  on appropriate age for learning second language
- A historical overview of development of English language Teaching in India
- Aims and objectives of teaching English—Objectives of teaching English as per the Kothari Commission and NCF-2005, Objectives of teaching English as second language in the elementary level in West Bengal

#### Unit-2: Content—Proficiency

- Critical reflection upon the content of the text books from class I-VIII
- Personal response to the poems and stories in the text books
- Critical reflection on adapting the text to the individual and special needs of the diverse learners
- Reading from authentic sources beyond the text books like newspaper reports, popular and relevant stories[children's literature], rhymes, notice, popular culture and stories/folklores from local/indigenous cultures and relating them to the text
- Reading beyond the text about topical issues like ecological issues and bio-diversity, education, equity etc and relating them to the content in the text books

#### Unit-3: Approaches, Methods and Techniques of Teaching English in the Elementary Level

- Concept of Approach, Method and Technique—definition and difference between them, importance of approaches and methods in teacher education programs
- Structural Approach, Grammar Translation Method, Situational Language Teaching& Audiolingual method, Communicative Language Teaching, Task-based Language Teaching, Cooperative Language Teaching, Content and Language Integrated Teaching in multicultural and multilingual context, Eclectic method
- Constructivist approach to teaching English at the elementary level

#### Unit-4: English as a Skill Subject

- The basic skills of language
- Teaching English as a skill based subject in the elementary level with reference to the objectives specified by the NCF 2005 and the West Bengal Board of Primary Education&West Bengal Board of Secondary Education
- Development of listening skill—importance of listening skill, types of listening, aims of teaching listening to learners at the elementary level, problems, strategies
- Development of speaking skill—importance of speaking skill, features, aims of teaching speaking to learners at the elementary level, problems, strategies
- Development of reading skill—importance of reading skill, types of reading, features, stages, aims of teaching reading to learners at the elementary level, problems, strategies/methods
- Development of writing skill—importance of writing skill, types of writing, features including mechanics of writing, aims of teaching writing to learners at the elementary level, problems, strategies
- Developing vocabulary and teaching grammar through the four basic skills—principles and strategies

#### Unit-5: Teaching Learning Material for Teaching English Including CALL (Computer Aided Language Learning)

- Teaching Learning Material—Nature, Features, Importance in language teaching-learning, Types, Preparation of low cost TLM, principles for preparation of TLM for children with special needs
- CALL(Computer Assisted Language Learning) —Presentation of textual, graphical and multimedia Information for learners at the elementary stage; Principles; Factors for effective use of CALL for diverse learners in an inclusive classroom
- Use of Realia for teaching language nature, features, importance, strategies

#### Unit-6: Functional Grammar and Vocabulary

- Parts of speech with reference to the text books of class I-VIII
- Phrases and sentences—structural and functional division of sentences, Types of sentences, framing Wh-questions, Transformation of sentences(Positive-Negative/simple-compoundcomplex/ degree of comparison/voice/either-or/so-that/ neither-nor/too-to/infinitives), Joining of sentences
- Reported speech
- Functional classification of verbs (main verbs, auxiliary verbs), different forms of verbs, tenses, subject-verb agreement with particular reference to the use in the text books of class I-VIII

- Use of Phrasal verbs
- Understanding the basic elements of phonetics, stress with special reference to the words, phrases and sentences used in the text books of class I-VIII

#### Unit-7: Interaction in a Language Class

- Creating a child-centric, trauma-free homely environment for teaching English—principles, factors, strategies
- Concept of fluency, accuracy, appropriacy—significance of fluency and appropriacy in the English classroom at the elementary stage
- Learner interactional patterns; Group work and pair work—nature, principles, activities for developing the four basic skills of language
- Assigning activities according to the level of the learner; Language games—developing and using (available free
  of cost in various websites) various language games for developing the four basic skills of language and
  effective class management
- Preparation of work/activity sheets including those for children with special needs for developing the four basic skills of language
- Theme based teaching ( based on the prescribed text books of Class I-VIII) in an inclusive class
- Scaffolding and gradual withdrawal of support

#### Unit-8: Proficiency in Framing Instructions

- Understanding the importance of giving and following instructions in a communicative setting
- Framing instructions for different activities for teaching English with reference to the content in the text books from Class I to Class VIII
- Framing tasks on Listening, Speaking, Reading and Writing- activities to be done at the Prelistening/speaking/reading/writing, While- listening/speaking/reading/writing and Postlistening/ speaking/reading/writing stages
- Designing activities and instructions on the basis of the types of activities given in the prescribed text books (like categorizing, sequencing, matching, justifying, cause-effect relationship etc) and writing down the objectives of designing each such activity

#### Unit-9: Proficiency in Communication

- Understanding different types of writing for elementary level students and relevant exercises
- Conversations in given contexts and simulated real life situations
- Preparing Teaching Journals—reflecting upon the teaching activities and preparing written accounts of teaching experiences based on students' response/feedback
- Preparing book reports on books on children's literature beyond the text books
- Reflecting and speaking on topical issues like child-labour, drop-outs, mid-day meals, equity, global warming, universalization of elementary education etc.
- Preparing wall magazines, posters related to awareness campaigns, skits etc on given themes
- Assessing Students' performance in communication-both oral and written

#### Unit-10: Planning and Evaluation

- Importance of planning activities and lessons appropriate to the level of the learners
- Lesson plans —Process based teaching and Macro teaching
- Selected five skills at the micro-level of lesson planning integration, facilitating child-centric
- learning, inspiring learner to question, developing the learners—power of observation, relating performing arts with the learning situation
- Developing tools of assessment—concept of different types of questions, developing small achievement tests with proper weightage on knowledge, comprehension, application and psychomotor type of questions/activities.
- Assessment of students—performance in the four basic skills of listening, Speaking, Reading, Writing
- Creating students' profile and recording performances
- Remedial measures
- Undertaking Action Research projects under the supervision of teacher educators—for example:
  - (i) Understanding the various difficulties of learning English among the students of a particular class of schools within the vicinity of the respective teacher education institute, clustering them into certain patterns and providing remedial measures

OR

(ii) Identifying the learning needs and difficulties of diverse learners with special needs in a particular class of schools in the vicinity of the Teacher Education Institution and providing measures for teaching English to such learners with individual learning needs.

#### **CPS-03: MATHEMATICS**

#### Unit-1: Perspective about Mathematical Knowledge-1

**Class-9 Hours** 

- Meaning, nature and characteristics of mathematics
- Processes in mathematics—mathematical representations, mathematical relations, mathematical reasoning, problem solving in mathematics and communication in mathematics.
- Goals of Mathematics Education—Cognitive, affective and Psychomotor domain.

#### Unit-2: Perspective about Mathematical Knowledge-2

Class-10 hours

- Aims of teaching mathematics—disciplinary, utilitarian, recreational.
- Objectives of mathematics education of elementary level in terms of competencies/learning outcomes, development
  of interest and appreciation.
- Effect of socio-cultural back ground of children on mathematical knowledge.

#### Unit-3: Pedagogic Content Knowledge-1

Class-7 hours

- Number: Number concepts, counting, place value, rational numbers, Arithmetic operations, Fractions, Decimals
- Spatial understanding and Shapes—vocabulary of special relationship, basic geometrical shapes and their characteristics, Triangle, Rectangle, Square, Circle, Sphere, Cylinder and Cone, Rectangular parallelopiped, cube.

#### Unit-4: Pedagogical Content Knowledge-2

Class-6 hours

- Measurement: Length, perimeter and area of square & rectangle circle, weight, volume, Time and money
- Data handling: Collection and representation of data through various methods—tables, tallies, pictogram and bar graph—interpretation of idea

#### **Unit-5:** Elementary Statistics

Class-8 hours

- Basic concept in statistics
- Tabulation of Data
- Graphical presentation thereof
- Measure of Central Tendency and dispersion

#### Unit-6: Conceptualization of Mathematics

Class-15 hours

- Constructivist Approach in Mathematics
- Activity based learning, strategies for concept formation and concept attainment, structuring activities for inductive thinking and inquiry based learning, structuring learning, activities using manipulative, story problems, games, outdoor activities and real life situations.
- Co-operative learning strategies (learning together technique)
- Theory of Mathematics learning: Piaget, Vygotsky, Dienes, Bruner
- Concept of Estimation—Measurement related
- Use of out of School Mathematics for conceptualization of Formal Mathematics

#### Unit-7: Resource in Mathematics Learning

Class-6 hours

- Preparation and use of learning materials in mathematics.
- Principles of selection and effective use of LTM

#### Unit-8: Learning Methods and Approaches of Mathematics

Class-7 hours

- Observation, experimentation, Demonstration, Problem Solving
- Project

#### Unit-9: Planning for Teaching Mathematics

Class-10 hours

- Unit—wise process based lesson planning, Preparation of lesson notes on the basis of competencies.
- Planning for Teaching—Addressing problems in mathematics teaching and their probable solutions.

#### Unit-10: Assessment of Mathematics Learning

Class-12 hours

- Meaning and purpose of assessment and evaluations
- CCE in mathematics, Formative and Summative
- Tools of assessment in mathematics—Achievement test and diagnostic test in mathematicsconstruction and use
- Assessment of misconceptions in Mathematics

#### **CPS-04: ENVIRONMENTAL SCIENCE**

#### Unit-1: Basic Concept of EVS

- Meaning, Nature and Characteristics of EVS.
- Process in EVS—representations, relations, reasoning, problem solving in day-to-day activities and communication
  in life skills.
- Goals of EVS Educations—Cognitive, affective and psychomotor domain.

#### Unit-2: Aims and objectives of EVS

- Aims of Teaching EVS—Multi disciplinary, Utilitarian.
- Objectives of EVS in terms of Competencies/Learning outcomes in terms of contextualization, development of interest and appreciation.

#### Unit-3: Curriculum Construction of EVS Learning

- Principles of Curriculum Construction
- Organization of Curriculum Construction.

#### Unit-4: Approaches and Methods for Teaching-Learning of EVS

- Approaches—Transmission, Child—Centric, Discovery, Cons-tructivism.
- Methods—Story telling, Observation, Discussion, Dramatization, Discovery, Local Field Study, Demonstration, Problem-solving, Project, Experimentation.

#### Unit-5: Resource and Materials for Teaching—Learning EVS

- Preparation and use of Teaching-Learning-Materials (LTM) in EVS.
- Use of Local Resources in EVS Learning
- Organizing Resource Rooms in Schools for preserving Audio-Visual Teaching Aids (ET Lab)
- Organizing Library for preserving Text Books, Teachers—Hand Books, Reference Books and some periodicals.
- Organizing Laboratory as Science resource room.

#### Unit-6: (Knowledge) Critical analysis of the Contents of EVS meant for class I to V.

#### Unit-7: (Knowledge) Critical analysis of the contents of EVS meant for class VI to VII.

#### Unit-8: Lesson Planning of EVS Learning

- Unit and Sub-Unit based Lesson Planning (Micro and Macro), preparation of lesson notes on the basis of competencies (Micro)
- Maintaining Note Books (Micro & Macro) for evaluation of lesson plan along with Work-Sheet with each and every Lesson Plan.

#### Unit-9: Action Research and Project

- Action Research for improvement of Teaching-Learning of EVS
- Preparation of Project

#### Unit-10: Learning Assessment in EVS

- Tools and Techniques of Evaluation
- Construction of Achievement Test
- Knowledge of CCE in EVS.

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