Course 08 - Cognition, Learning and the Socio-Cultural Context

Marks: 20+80

Educational Objectives:
After going through this course the learners will be able to-
• define learning and cognition
• identify the importance of play
• analyze language and communication
• appraise self and moral development

Course Content:

UNIT 1: Learning and Cognition-I

• Learning: Concept of learning, processes of children’s learning, basic ideas of Behaviourism and its critique; Associative Learning: Classical Conditioning, Operant Conditioning
• Cognitivism: Principles of Cognitivism
• Constructivism: Introduction to the concept, Principles.
• Piaget’s theory: what is learning, structures and processes of cognitive development, cognitive conflict characteristics of thought in different stages, implications for teaching-learning

UNIT-2: Learning and Cognition-II

• Vygotsky’s theory – Introduction, Development of Language, Development of Thought, concept of ZPD, Scaffolding, Concept of Social Situation Development.
• Information processing approaches: Information Processing Theory, Information Processing Model: Main Components; Assumptions.
• Strategies for Increasing Memory: Elaboration, Manipulation, Association, Clustering, other strategies.

UNIT 2: Play

• Meaning of Play, characteristics, kinds and types of Play
• Play and its functions: linkages with the physical, social, emotional, cognitive, language and motor development of children, cross-cultural and socio-economic differences in children’s play
• Play Governed by Rules.

Unit 3: Language and Communication

• Meaning of Language and Communication

• The Process of Language Acquisition: Some Theories, Imitation as a Factor of influencing Language Learning, Reinforcement, Biological or Nativist Explanation, Cognitive Theory and Language Development.

• Development of Language: Pre-Language Communications, First word, Telegraphic Words, Use of Sentences.

• Social Interaction and Language Development

• Language and Culture

Unit 4: Self and Moral development

• A sense of self: self-description, self-recognition, self-concept; self-esteem; social comparison;

• Moral development: perspective of Kohlberg and Carol Gilligan’s critique; Piaget’s Theory,

• Cultural variations in moral reasoning.
Course 09-School Culture, Leadership and Change

Marks: 10+40

Educational Objectives:
After going through this course the learners will be able to-

• describe the structures and processes of school education system
• be acquainted with school effectiveness and school standards
• familiarize with school leadership and school management
• know about the ideas and experiences that facilitate change in school education

Course Content:

Unit 1: Structures and Processes of School Education System in India with special reference to Assam

• Concept of Education and Schooling: Types of Schools - Pre-primary Schools, Primary Education, Secondary Education

• Open School

• Roles and Responsibilities of Education Functionaries

• School Culture, Organisation, Leadership and Management

Unit 2: School Effectiveness and School Standards

• What is school effectiveness and how it is measured?

• Understanding and developing standards in education

• Communication in the classroom and multiple learning levels in the classroom

Unit 3: School Leadership and Management

• What are leadership and management?

• Administrative leadership

• Team leadership

• Pedagogical leadership

• Leadership for change
Unit 4: Change Facilitation in Education

- Issues in Educational Reform
- Facilitating change in Education: Equity in Education, Schemes and Incentives for girls’ education
- Sarva Siksha Abhiyan- Aims and objectives

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Course 10- Contemporary Issues in Education

Marks: 10+40

**Educational Objectives:**

After going through this course the learners will be able to-

- describe the concept and nature of Inclusive Education
- identify children with special needs
- overview on gender concerns in society
- elucidate the concept of human rights, peace and value education

**Course Content:**

**Unit 1: Inclusive Education**

- Meaning of Inclusive Education
- Inequalities and diversities in the Indian context
- Implications for classroom teaching including multi-grade classroom and single teacher school
- Challenges for implementing inclusive education

**Unit 2: Children with Special Needs**

- Concept of Children with Special Needs
- Disability and inclusion: historical and contemporary perspectives
- Range of learning difficulties
- Disability identification, assessment and interaction
- Classroom practices for teaching children with Special educational Needs

**Unit 3: Gender Concerns**

- Gender Dimensions in Society
- Gender Concern in Education:Gender Concern in Education at Elementary level , Gender Concern in Education at Secondary Level, Gender Concern in Education at Higher level

- Measures for Reducing the Educational Inequality in Schools

**Unit 4: Human Rights, Peace and Value Education**

- What are the human rights
- Need for human rights
- Basic principles of Peace Education
- Value Education: meaning, concept and need
Course 11 - Proficiency in English

Marks: 10+40

Educational objectives
After going through this course the learners will be able to -
- identify the nature of language
- improve their skills in the learning of the English language
- strengthen their knowledge of grammatical, lexical and discourse system in English
- link up their proficiency in English with pedagogy

Course Content

Unit 1- Nature of Language
- What is language: first, second and foreign language?
- Language as a means of communication and thinking
- Constructing knowledge in the classroom
- Understanding the importance of a language rich classroom

Unit 2- Listening and speaking
- Developing listening and speaking skills
- Listening with comprehension
- Sound system of English- segmental and supra segmental features
- Using dictionary for correct pronunciation and stress
- Phonemic drills (with the use of minimal pairs e.g., bit, beat etc.)
- Organizing listening and speaking activities: rhymes, chants, songs, use of stories, poems, role play and dramatization

Unit 3- Reading
- Development of reading skills
- Reading with comprehension different types of texts
- Reading for global and local comprehension
- Inferences and extrapolation
- Using reading as tool for reference skills i.e. use of dictionary, encyclopedia and internet
• Creating environment for reading: reading clubs, class libraries
• Reading aloud and silent reading
• Scaffolding: concept and activities
• Reading different types like stories, poems, riddles, jokes and instructions for games

Unit 4- Writing
• Developing writing skills
• Mechanics of writing (strokes and curves, capital and small, cursive and print script, punctuation)
• Controlled/guided writing (verbal and visual inputs)
• Free and creative writing
• Writing a paragraph: identifying a topic sentence, arranging sentences in a logical order and joining them with linking words and phrases
• Different forms of writing: letters (application, complaint, permission, invitation), messages, notices and posters
• Writing as process

Unit 5- Grammar
• Parts of speech, phrases and clauses
• Kinds of sentences: subject-verb agreement; tenses; connectors
• Non finites; voices; narration

Unit 6- Assessment and Evaluation
• Continuous and comprehensive evaluation in English
• Assessing listening and speaking - using interviews, story-telling, re-telling
• Assessing reading comprehension
• Assessing writing skills
• Assessing skills in grammar
Course 12 - Teaching of Environmental Studies -II

Marks: 10+40

Educational Objectives:
After going through this course the learners will be able to-

• explain the concept of environment
• carry out planning for teaching EVS
• familiarize with classroom transaction
• carry out continuous and comprehensive evaluation in EVS

Course Content:

Unit 1: Concept of Environment

• Concept of Physical Environment, Biological Environment and Social Environment

Unit 2: Planning for Teaching EVS

• Considerations in concept maps and thematic web charts.
• Resource pool of materials: community resources, developing, maintaining and utilizing other resources – newspaper reports, films, pictures, photographs, collection of seeds, flowers etc., ionic maps and local area maps

Unit 3: Classroom Transaction

• Ways of conducting inquiry: activities, discussion, and small group work, field visits, project, surveys, experimentation etc.

Unit 4: Assessment in EVS

• Assessment and evaluation
• Continuous and comprehensive evaluation in EVS
Course 13- Teaching of English

Marks: 10+40

Educational Objectives:

After going through this course the learners will be able to:

• identify the issues of teaching English at the elementary stage
• explain various approaches of teaching English
• explain the various methods of teaching English
• develop materials for effective teaching in English
• identify different techniques for teaching different skills

Course Content:

Unit 1: Issues of Teaching of English at the Elementary Stage

• Issues of learning English in a multi-lingual/multi-cultural society: the multi-lingual nature of India, English as the language of prestige and power
• Teaching English as a first language, second language and foreign language: developmental, socio-economic and psychological factors; the politics of teaching English in India; key factors affecting second language acquisition

Unit 2: Approaches to Teaching English

• Introducing Learners to historical view of English in India: The Three phases of Introduction of English in India, Beginning of English Education in India in the 19th Century, English in Independent India
• Theories of Language Learning: Behaviourist Theory, Cognitive Theory, Constructivism
• Methods of English Teaching: Grammar Translation Method, The Direct Method
• The Approaches of English Teaching: The Structural Approach, The Reading Approach
• Communicative Language Teaching: The Principles, features and procedure of Communicative Approach, Techniques used in Communicative Approach, Merits and Demerits of Communicative Approach
Unit 3: Teaching Strategies

- The textbook: Critical literacy, personal response to poems and stories, adapting the textbook
- Beyond the textbook: including children’s literature in the classroom (poems, stories, songs, etc.)
- Listening and Speaking Skills: simple instructions, story-telling etc., using pair-work and group-work meaningfully to encourage speaking and participation
- Reading: beginning reading - Pre-reading, while-reading and post-reading activities; comprehension skills
- Guessing meaning from context, word-attack skills; types of reading, Independent reading, setting up reading corners; guided reading and shared reading
- Making reading buddies; reading aloud and silent reading.
- Writing: providing triggers for writing – writing as a process controlled, guided, and free writing; writing – letters, daily diary/journals, logs (responding to something read or observed), using pictures.

Unit 4: Learner Assessment

- Assessing, speaking and listening - using interviews, story-telling, re-telling
- Assessing reading comprehension
- Teacher’s diary – anecdotal records, assessing writing - informal feedback from teacher, measuring progress
- Responding to content and form, using portfolios for subjective assessment, continuous and comprehensive assessment
- Attitude towards errors and mistakes in second language learning
- Review of current assessment procedures - cursive writing, dictation, cloze, questions and answers, utilization of feedback.

Unit 5: Planning and Material Development

- Unit planning for a learner-centered classroom
- Preparation of low-cost teaching aids
- Using the classroom as a resource.
Course 14: OPTIONAL PAPER
Marks: 20+80

A: TEACHING OF MOTHER TONGUE

Educational Objectives:
After going through this course the learners will be able to-

• identify the importance of mother tongue in social context.
• get an insight to various constitutional provisions for teaching mother tongue.
• develop various reading and writing skills
• outline the teaching learning process in mother tongue
• carry out assessment and evaluation

Course Content:

Unit 1: Social Context and Language

• Oracy and Literacy; Objective of teaching mother tongue; Role of mother tongue in education, child development and its relationship to language; Nature of language: language - its nature, characteristics, functions, elements of mother tongue- sound system, vocabulary, scripts, spelling system and writing system

Unit 2: Constitutional Provisions for Teaching Mother Tongue

• Myths associated of L1 with L2; Relationship between L1 and L2

Unit 3: Developing Reading Skills

• Reading an expository texts; strategies; comprehension; activating schema; building schema; reading to learn; acquisition of registers
• Ways of reading; pre-reading and post reading activities
Unit 4: Developing Writing Skills

• Linkages between reading and writing

• Writing as a tool of consolidating knowledge, responding to/ aesthetically relating to narrative texts

• Assessment of writing

Unit 5: Literature

• Types of texts; narrative and expository reader’s response to literature, schemas and interpretation of texts

• Engaging with a text

• Various literary genres such as poem, story, biography etc.

• Using literature across the curriculum

Unit 6: Teaching learning process in mother tongue

• Principles of teaching mother tongue

• Problems of teaching mother tongue

• Standard language and interference of dialects

Unit 7: Assessment and Evaluation

• Continuous and comprehensive evaluation in mother tongue (use of various oral and objective type tests)
B. TEACHING OF SOCIAL SCIENCES

**Educational objectives**

After going through this course the learners will be able to-

- identify the nature of social sciences
- describe the important concepts of social sciences
- apply various approaches and methods of teaching social sciences
- carry out assessment and evaluation in social sciences

**Course Content**

**Unit 1: Nature of Social Sciences**

- Nature and scope of various social sciences- geography, civics, history, economics, political science, etc.
- Importance of social sciences at school level
- Different approaches to organize social sciences: discipline centered, integrated approach and interdisciplinary

**Unit 2: Important Concept of Social Sciences**

- Beginning of social sciences
- Understanding change and continuity: time and space, chronology
- History of civilization and culture: Major Ancient World civilization, Ancient Indian civilization
- Society and social structure: social stratification, community and groups
- Region: resources, space and people
- Market and exchange

**Unit 3: Methods and approaches of teaching social sciences**

- Story telling/ narration
- Dramatization/ role play
- Dialogue and Discussion
- Use of audio-visual aids such as films, documentaries/ recorded interview, cartoons etc.
- Use of teaching aids such as globe, atlas (historical as well as geographical), charts, status, currency, newspapers, magazines, maps, books, novels etc.
- Field visits, tools, museums, historical monuments etc.
• Use of community resources of Assam such as Namghar, Satra, Maqtab, Madrassa, Buddha Bihar, Church

Unit 4: Assessment and Evaluation in Social Sciences

• Aspects of evaluation in social sciences: Evaluation as continuous and comprehensive process, formative and summative evaluation

• Tools of evaluation in social studies (oral questions, quizzes, assignments, problem solving, exercises, observation, discovery, comparisons, project work, written test, group assessment, experience sharing)

• Different methods of testing
C: TEACHING OF GENERAL SCIENCE

Educational Objectives:
After going through this course the learners will be able to -
• identify the nature of science in school curriculum
• apply various effective approaches and methods of teaching science in the classroom transaction
• discuss the value of science for all
• carry out continuous and comprehensive evaluation in science

Course Content

UNIT 1: Science in School Curriculum

- Nature of Science: Concept of Science, Science as a Process, Science as a Product
- Need of Teaching Science, Need of Teaching Science at Elementary Level
- Objectives of Teaching Science: Goals / Aims of Science Teaching, Bloom Taxonomy of Educational Objective, Instructional / General Objectives for Science Teaching
- Science Curriculum: Principles of Curriculum Construction, Important Concepts of Science, Children's Ideas Related to Science Concept, Science Education in India

UNIT 2: Classroom Transaction

- Teaching Science in different disciplines: Approaches and methods of teaching science
- Different ways of conducting Inquiry: Setting up simple experiments and investigations in different contests: Enquiry method, Activity method, Problem solving and, Projects method, Unit planning and Lesson planning, I.C.T. in science and technology
- Importance of science museum, field trips, projects and exhibition

UNIT 3: Science for All

- Issues of Gender, Location, Language, Socio-Cultural Background in Science Classes:
• Issue of Gender, Issues of Location, Issue of Language, Issue of Cultural Background

• Equity in Science Education: Role of Teachers to Ensure “Science for All” in the Science Classroom

• Interface between Science and Society

UNIT 4: Assessment and Evaluation procedure in Science

• Evaluation in Science: Continuous and Comprehensive Evaluation in Science

• Tools and Techniques of Evaluation: Types of Tests: Easy and Objectives, Setting a good Question paper

• Developing different assessment strategies including appropriate questions for paperpencil test

• Assessing Teaching - learning materials such as books, films, multimedia packages for their relevance and age appropriateness

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D: TEACHING OF MATHEMATICS

Educational objectives
After going through this course the learners will be able to-
• develop insight into ways of reasoning mathematically.
• create awareness and appreciation about algebraic thinking.
• develop understanding of geometrical concepts.
• familiarize with practical arithmetic and handling data
• communicate mathematics in a better way
• enhance the capabilities in assessment in mathematics

Course Content

Unit 1: Mathematical Reasoning

• Processes of generalization: Pattern Recognition and Inductive Reasoning Process that Enable Formation of Hypothesis

• Structure of Mathematics

• Validation process of mathematical statements: Proof, Counter Example;

• Invalidity Statements by Counter Example

• Creative thinking in mathematics:

• Problem solving in mathematics -- a process:

Unit 2: Algebra Thinking

• Invention of Unknown Numbers

• Functions and Relation

• Formation of Equation with the help of Unknown Number in solving Mathematical problem

• Formation of Equation

• Solution of Simple Equation

• Solution of Mathematical Problem Using Equations
Unit 3: Practical Arithmetic and Handling Data

- Collection, classification and interpretation of data
- Presentation of collected data
- Elementary statistical techniques
- Time-tableing including railway time tables
- Percentage
- Ratio and proportion
- Interest
- Discount

Unit 4: Geometric ways of looking at space and shapes

- Geometric thinking Levels - Van Hieles
- Simple two and three dimensional shapes – Geometric Vocabulary
- Congruency and similarity
- Transformations and geometric Shapes
- Measurement and geometric shapes
- Construction of the geometrical shapes using geometric equipment.

Unit 5: Communicating Mathematics

- Curriculum and Classroom Practices
- The role of text books in the teaching-learning process of mathematics
- Mathematics Laboratory/Resource Room
- Feed back to students about errors committed in their work
- Mathematics phobia and coping with failure

Unit 6: Issues about Assessment in Mathematics

- Continuous and comprehensive evaluation in Mathematics
- Open-ended questions and problems
- Assessment for conceptual understanding
• Assessment for evaluation of skills such as communication and reasoning

WORKSHOP - II
Teacher Identity and School Culture
Marks: 50

Rational and Aim:
This workshop on professional expertise is aimed at initiating a process of original thinking in learners about their vision of education and also to provide them the space to experiment with ways to translate the vision of education into a workable curriculum rooted in the contemporary Indian reality, and thereby develop in them the professional capacities and attitudes that will facilitate this process. The workshop will be conducted at block level during the summer vacation for twelve days in the second year.

Educational Objectives
After attending this workshop the learners will be able to-
• develop a vision for education
• apply the psychological principles of learning in their regular classroom situation
• understand the contemporary context of education and explore the alternatives in education
• help students to transform the quality of classroom interactions through application of professional attitudes and capacities
• explore their role as creative guide in learning that is drama driven

Workshop Themes
• Exploring the personal vision of education and teaching and learning process
• Understanding the psychology of learning and processes of children's learning
• Learning from the vision of some leading educational psychologists
• Understanding some innovative concepts in the field of teaching-learning and ability to apply these concepts in the practical classroom situation
• Introducing some innovations in the field of education and encourage them to reflect on various possibilities
• Familiarizing with the maxims, device and techniques of teaching-learning
• Interrogating educational practice, envisioning curriculum, and approaches of transaction
• Sensitizing about the environmental awareness
• Familiarizing with various educational and school reforms: incentives and schemes for equalization of educational opportunities
• Understanding the teacher’s role in propagation of peace and conflict resolution in one’s locality.
• Understanding the nature of language: ways to communicate with students in a multilingual classroom reflecting on one’s own experiences in the classroom
• Proficiency in English: developing the skills of listening, speaking, reading and writing in elementary level students
• Recognizing the role of ‘drama as education’ in the elementary school: identifying and developing one’s own creative potential
Teaching-learning process in the 21st century is inadequate and incomplete unless the information technology is used. Keeping in view use of computer technology in disseminating knowledge and education, it is utmost necessary to train the school teachers in the development of these IT skills.

**Educational Objectives:**

After going through this course the learners will be able to-

- use the most popular word processor Microsoft Word
- create spreadsheet document with Microsoft Excel
- prepare presentations using Microsoft PowerPoint
- create email account and browse the Internet

**Course Content**

**UNIT 1: Microsoft Word**


**UNIT 2: Microsoft Excel**

Starting MS-Excel, Working with Toolbars, Row, Column and Cell, Working with Excel: Creating a New Workbook, Working with Cells and Fonts, Merging Cells, Inserting and Deleting Rows and Columns; Saving a Workbook, Closing a Workbook; Working with Formula and Working with Charts.
UNIT 3: Microsoft PowerPoint

Starting MS-PowerPoint, Components of PowerPoint Window, Creating a New Presentation, Working with Slides, Creating/Inserting New Slides, Deleting Existing Slides, Applying Design Templates, Applying Custom Animations, Applying Slide Transitions, Saving a Presentation, Running a Presentation, Closing a Presentation, Opening an Existing Presentation.

UNIT 4: Basics of Internet

Creative Drama or Music

MARKS: 50

The learners are required to prepare a project report, which will carry 50 marks. This report has to be submitted in the prescribed format for evaluation. There are two optional areas for preparing the project. They are:

(A) Creative Drama
(B) Music

The learners have to carry out their project on any one option.

Option A
Creative Drama

- Drama provides an outlet for self-expression and helps the development of imagination, creativity and artistic awareness along with increasing social and moral awareness in the children. It also enhances the child’s fluency of speech and expression, inculcates the sense of togetherness in them and boosts their self confidence. Therefore, this project on creative drama has been included so that the learners can identify the benefit of creative drama as a part of teaching-learning process.

Learners are required to engage their students in a dramatic performance in any one of the following:

1) Freedom struggle movement or Martyrs of Assam
2) Works of Mahapurusha: Sankardeva or Madhabdeva
3) Environmental issues such as deforestation, global warming, population explosion, etc.
4) Social issues such as child marriage, child labour, illiteracy, gender discrimination, practice of witch-craft, etc.
5) Historical character of India or Assam
6) Various children’s literature
Option B
MUSIC

- Music can transform the minds of young students to a great extent. For example, the practice singing of patriotic songs as a part of school curriculum may inculcate in them a sense of togetherness and belongingness. As a teaching-learning tool, music is very effective in the sense that even music can teach or provide knowledge through the rhythmical way a song is sung or a poem is recited. So music can very well make learning by doing a reality if taken seriously. Keeping in mind all these things, music has been included so that the learners can not only help their students to appreciate musical art at an early stage, but also can generate in them social awareness, love for human values and socialization.

The learners are required to engage their students in a musical performance, either composed by themselves or borrowed from others on any one of the following themes:

1. Patriotic Songs
2. Folk songs
3. Devotional songs
4. Songs to appreciate the beauty of the nature or their surrounding
5. Songs of regional languages (including Rabha Sangit, Jyoti Sangit, etc.)
Health and Education

Marks: 50

- The activity of seminar preparation and presentation on Health and Education has been included with an intention of developing the skill of the learners to gather extensive and scientific knowledge on the various topics related to betterment of the students and present it before the students in an effective manner.

The learners are required to prepare a seminar paper on any one of the below mentioned topics and will have to make a power point presentation and present the seminar in their respective study centres. This presentation will be observed and evaluated by a supervisor. The learners will have to submit their seminar papers for evaluation.

- Food and Nutrition
- Communicable Diseases
- Understanding One's body, Alternative systems of health and healing
- First Aid
- Child Abuse
- Principles and benefits of Yoga
- Emotional Health- Physical Health- Cognition linkages
- Need for Physical Education; Linkages to health and education
- Physical Education and ‘Play’
- Development of team spirit, coordination, cooperation
- Diversity in capabilities and interests

Marks distribution

Seminar Preparation: 25
Seminar Presentation: 25
Teaching Practice

Marks: 200

- The practice teaching session will develop the skills of the learners to use various techniques of effective teaching which they have learned theoretically to apply in the actual classroom situations. This will also improve their efficiency to plan and act in an effective way and reduce the waste in terms of time, energy and money.

The learners will have to prepare Annual Plan, Unit Plans and Lesson Plans in any two subjects including their optional subject. They will carry out their teachings in their own schools and their classes will be supervised by the supervisors.

Number of Lesson Plans: 10

Number of classes to be supervised: 10

**Marks distribution**

Teaching Practice: 100

Annual Plan, Unit Plans and Lesson Plans: 80

Viva voce: 20