

Syllabus and Course Scheme
Academic year 2022-23



Bachelor of Education - Special Education

B.Ed.Spl.Ed.(VI)
I Year and II Year

UNIVERSITY OF KOTA
MBS Marg, Swami Vivekanand Nagar,
Kota - 324 005, Rajasthan, India
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B.Ed.Spl.Ed.(VI) 1st Year

Course	Course title	Marks
A1	Human Growth & Development	100
A2	Contemporary India and Education	100
A3	Learning, Teaching and Assessment	100
A4	Pedagogy of School Subjects (ANY ONE from Part I	100
A5	Pedagogy of School Subjects (ANY ONE from Part I to Part V)	100
B6	Inclusive Education	50
B7	Introduction to Sensory Disabilities (VI, HI, Deaf-blind)	50
B8	Introduction to Neuro Developmental Disabilities (LD, ID / MR, ASD)	50
B9	Introduction to Locomotor & Multiple Disabilities (Deaf-Blind, CP, MD)	50
C12	Identification of Children with Visual Impairment and Assessment of Needs	100
C13	Curriculum, Adaptation and Strategies for Teaching Expanded Curriculum	100
E1&E2	Practical: Cross Disability and Inclusion Practical: Disability specialization	100
	TOTAL	1000

B.Ed.Spl.Ed.(VI) 2nd Year

Course	Course title	Marks
B10	Skill based Optional Course (Cross disability and inclusion) ANY ONE	50
B11	Skill based Optional Course (specialization disability) ANY ONE	50
C14	Intervention and Teaching Strategies	100
C15	Technology and Education of the Visually Impaired	100
C16	Psycho Social and Family Issues	50
D17	Reading and Reflecting on Texts (EPC)	50
D18	Performing and visual Art	50
D19	Basic Research & Statistic (EPC)	50
E1	Practical: Cross Disability and Inclusion	100
E2	Practical: Disability Specialization	100
F1	Main disability special school (Related to Area C)	100
F2	Other disability special school	100
F3	Inclusive school	100
	TOTAL	1000

B.Ed.Spl.Ed.(VI) 1st Year

HUMAN GROWTH & DEVELOPMENT

Course Code: A 1

Contact Hours: 60

Marks: 100

Introduction

This course exposes student-teachers to the study of child and human development in order to gain a better understanding about variations and the influence of socio-cultural-political realities on development. A critical understanding of theoretical perspectives of development would aid in their application in teaching learning process. Through close observation of children in their natural environments the teacher trainee would be able to situate their theoretical knowledge within realistic frames. This course would also be able to equip them to reflect and critique the normative notions of childhood and adolescence.

Objectives

After studying this course the student- teachers will be able to

explain the process of development with special focus on infancy, childhood and adolescence.

critically analyze developmental variations among children.

comprehend adolescence as a period of transition and threshold of adulthood.

analyze different factors influencing child development.

Unit 1: Approaches to Human Development

- 1.1 Human development as a discipline from infancy to adulthood
- 1.2 Concepts and Principles of development
- 1.3 Developing Human- Stages (Prenatal development, Infancy, Childhood, Adolescence, Adulthood)
- 1.4 Nature vs Nurture
- 1.5 Domains (Physical, Sensory- perceptual, Cognitive, Socio-emotional, Language & communication, Social relationship)

Unit 2: Theoretical Approaches to Development

- 2.1 Cognitive & Social- cognitive theories (Piaget, Vygotsky, Bruner, Bandura)
- 2.2 Psychosocial Theory (Erikson)
- 2.3 Psychoanalytic Theory (Freud)
- 2.4 Ecological Theory (Bronfrenbrenner)
- 2.5 Holistic Theory of Development (Steiner)

Unit 3: The Early Years (Birth to Eight Years)

- 3.1 Prenatal development: Conception, stages and influences on prenatal development

3.2 Birth and Neonatal development: Screening the newborn - APGAR Score, Reflexes and responses, neuro-perceptual development

- 3.3. Milestones and variations in Development
- 3.4 Environmental factors influencing early childhood development
- 3.5 Role of play in enhancing development

Unit 4: Early Adolescence (From nine years to eighteen years)

- 4.1 Emerging capabilities across domains of physical and social emotional
- 4.2 Emerging capabilities across domains related to cognition - metacognition, creativity, ethics
- 4.3 Issues related to puberty
- 4.4 Gender and development
- 4.5 Influence of the environment (social, cultural, political) on the growing child

Unit 5: Transitions into Adulthood

- 5.1 Psychological well-being
- 5.2 Formation of identity and self-concept
- 5.3 Emerging roles and responsibilities
- 5.4 Life Skills and independent living
- 5.5 Career Choices

Engagement with the field as part of course as indicated below

Hands on Experience

- Observe children in various settings and identify milestones achieved.
- Seminar on human development
- Writing Journal for reflection and case study

Suggested Readings

- Berk, L. E. (2000). *Human Development*. Tata Mc.Graw Hill Company, New York.
- Brisbane, E. H. (2004). *The developing child*. Mc.Graw Hill, USA.
- Cobb, N. J. (2001). *The child infants, children and adolescents*. Mayfield Publishing Company, California.
- Hurlocl, E. B. (2005). *Child growth and development*. Tata Mc.Graw Hill Publishing Company, New York.
- Hurlocl, E. B. (2006). *Developmental Psychology- A life span approach*. Tata Mc.Graw Hill Publishing Company, New Delhi.
- Meece, J. S., & Eccles J. L (Eds) (2010). *Handbook of Research on Schools, Schooling and Human Development*. New York: Routledge.
- Mittal. S. (2006). *Child development- Experimental Psychology*. Isha Books, Delhi.
- Nisha, M. (2006). *Introduction to child development*, Isha Books, Delhi.
- Papalia, D. E., & Olds, S. W. (2005). *Human development*. Tata Mc.Graw Hill Publishing Company, New York.

Santrock. J. W. (2006). *Child Development.*, Tata Mc.Graw Hill Publishing Company, New York.

Santrock. J. W. (2007). *Adolescence.* ,Tata Mc.Graw Hill Publishing Company, New Delhi.

CONTEMPORARY INDIA AND EDUCATION

Course Code: A2

Contact Hours: 60

Marks: 100

Introduction

This course will enable student-teachers to explore education from philosophical and sociological perspective and hands on experience of engaging with diverse communities, children and schools. It also traces the educational developments in the historical context leading to contemporary India. The course also includes various commissions and policies and issues and trends in the field of education, special education and inclusive education.

Objectives

After completing this course the student-teachers will be able to

Explain the history, nature and process and Philosophy of education

Analyse the role of educational system in the context of Modern Ethos

Understand the concept of diversity

Develop an understanding of the trends, issues, and challenges faced by the contemporary Indian Education in global context

Unit 1: Philosophical Foundations of Education

- 1.1 Education: Concept, definition and scope
- 1.2 Agencies of Education: School, family, community and media
- 1.3 Philosophies of Education: idealism, naturalism, pragmatism, existentialism, humanism, constructivism and connectionism
- 1.4 Classical Indian Perspective (Budhism, Jainism, Vedanta Darshan, Sankya Darshan)
- 1.5 Indian Philosophers (Aurobindo, Gandhi, Tagore, Krishna Murthy)

Unit 2: Understanding Diversity

- 2.1 Concept of Diversity
- 2.2 Types of Diversity: Gender, linguistic, cultural, socio-economic and disability
- 2.3 Diversity in learning and play
- 2.4 Addressing diverse learning needs
- 2.5 Diversity: Global Perspective

Unit 3: Contemporary Issues and Concerns

- 3.1 Universalisation of School Education, Right to Education and Universal Access
- 3.2 Issues of a) Universal enrolment b) Universal retention c) Universal learning
- 3.3 Issues of quality and equity: Physical, economic, social, cultural and linguistic, particularly w.r.t girl child, weaker sections and disabled

- 3.4 Equal Educational Opportunity: (i) Meaning of equality and constitutional provisions
Prevailing nature and forms of inequality, including dominant and minority groups and related issues
- 3.5 Inequality in Schooling: Public-private schools, rural-urban schools, single teacher schools and other forms of inequalities such as regular and distance education system

Unit 4: Education Commissions and Policy (School Education)

- 4.1 Constitutional provisions on education that reflect National Ideals: Equality, liberty, secularism, and social justice
- 4.2 National Commissions and Policies: Education Commission (1964), NPE and POA (1986, 1992), National Policy for Persons with Disabilities (2006)
- 4.3 National Acts: RCI Act, 1992, PWD Act, 1995, NT Act, 1999, RTE Act (2009 & 2012).
- 4.4 Programmes and Schemes: IEDC (1974, 1983), SSA (2000, 2011), RMSA, 2009, IEDSS, 2009
- 4.5 International Conventions and Policies: Salamanca Declaration and Framework, 1994; UNCRPD, 2006; MDG, 2015; INCHEON strategies

Unit 5: Issues and Trends in Education

- 5.1 Challenges of education from preschool to senior secondary
- 5.2 Inclusive education as a rights based model
- 5.3 Complementarity of inclusive and special schools
- 5.4 Language issues in education
- 5.5 Community participation and community based education

Some Suggested Activities on contemporary issues

Comparative study of different settings
 Conflicts and social movements in India: Women, Dalit, Tribal and Disabled
 Educational debates and movements
 First generation learners
 Children with disabilities
 Inclusive education
 RTE act in the context of disadvantaged
 Linguistic and religious diversity
 Human rights, minority rights
 Educational status of various groups
 Special and inclusive schools
 Analysis of contemporary debates

Essential Readings

Guha, R. (2007). India after Gandhi: The History of the World's Largest Democracy. Macmillon: Delhi.

National Education Commission. (1964-66). Ministry of Education, Government of India, New Delhi

National Policy on Education. (1986 & 92). Ministry of Human Resource Development Government of India, New Delhi.

Right to Education Act. (2009). Ministry of Human Resource Development, Government of India, New Delhi.

Suggested Readings

Aggarwal. J. C. (1992). Development and Planning of Modern Education: New Delhi Vikas Publishing House Pvt. Ltd.

Ain, L. C. (2010). Civil Disobedience, Book Review Literary Trust: New Delhi. Select chapters.

Anand, S. P. (1993). The Teacher & Education in Emerging Indian Society, New Delhi: NCERT.

Bhat. B. D. (1996). Educational Documents in India, New Delhi: Arya Book Depot.

Bhatia, K. & Bhatia, B. (1997). The Philosophical and Sociological Foundations, New Delhi Doaba House.

Biswas. A. (1992). Education in India, Arya Book Depot. New Delhi

Biswas. A., & Aggarwal, J.C. (1992). Education in India, Arya Book Depot New Delhi.

Chakravarty, S. (1987). Development Planning: The Indian Experience, Oxford University press: New Delhi.

Chandra, B. (1997). Nationalism and Colonialism, Orient Longman: Hyderabad.

Choudhary. K.C., & Sachdeva, L. (1995). Total literacy by 2000: New Delhi: IAE Association.

Deaton A., & Dreze, J. (2008-2009). Poverty and Inequality in India in Raj Kapila and Uma Kapila (Ed.) in Indian Economy since Independence. Oxford University Press: New Delhi.

Deshpande, S. (2004). Contemporary India: A Sociological View. Penguin: New Delhi.

Dubey, S. C (2001). Indian Society, National Book Trust: New Delhi.

Famous Speeches of Gandhi ji: Speech on the Eve of The Last Fast, January 12, 1948.

<http://unesdoc.unesco.org/images/0023/002322/232205e.pdf>

<http://www.gandhi-manibhavan.org/gandhicomelive/speech8.htm>

<http://www.mkgandhi.org/speeches/speechMain.htm>

Jain, L.C. (2010). Civil Disobedience, Book Review Literary Trust, New Delhi.

Jagannath. M. (1993). Indian Education in the Emerging Society, New Delhi Sterling publishers Pvt. Ltd.

Jangira, N.K. (2012). NCERT Mother of Inclusive Education Address on Golden Jubilee of NCERT at RIE, Ajmer on 01 Sept. 2012.

Kashyap, S. C. (2009). The Constitution of India, National Book Trust: New Delhi.

Sapra. C. L., & Aggarwal, A. (1987): Education in India some critical Issues. New Delhi: National Book Organisation.

Saraswathi, T. S. (1999). Culture, Socialization and Human Development, New Delhi: Sage Publications.

Sen, A., & Dreze, J. (1997). India: Economic Development and Social Opportunity, Oxford India: Delhi.

Speeches of Gandhi ji: Speech on the Eve of The Last Fast, January 12, 1948. Government of India.

Steven, B. (1998). School and Society, New Delhi: Sage Publications.

Suresh, D. (1998). Curriculum and Child Development, Agra: Bhargava.

Taneja. V.R. (1998). Educational Thoughts and Practice, Delhi University Publications.

Vaidyanathan, A. (1995). The Indian Economy: Crisis, Response and Prospects. Tracts of the Times. Orient Longman Publications: New Delhi.

Weber. O.C. (1990). Basic Philosophies of Education, New York Holt, Rinehart and Winston.

LEARNING, TEACHING AND ASSESSMENT

Course Code: A 3

Contact Hours: 60

Marks: 100

Introduction

This Course will initiate student-teachers to understand learning theories and as these translate into teaching and learning actions. Assessment of learning as a continuous process is also focused. The course also needs to focus on the PwD as Learner and their special education needs that teacher needs to address in diverse education settings.

Objectives

After completing this course the student-teachers will be able to

Comprehend the theories of learning and intelligence and their applications for teaching children

Analyse the learning process, nature and theory of motivation

Describe the stages of teaching and learning and the role of teacher

Situate self in the teaching learning process

Analyze the scope and role of assessment in teaching learning process in order to introduce dynamic assessment scheme for educational set up towards enhanced learning.

Unit 1: Human Learning and Intelligence

1.1 Human learning: Meaning, definition and concept formation

1.2 Learning theories:

Behaviourism: Pavlov, Thorndike, Skinner

Cognitivism: Piaget, Bruner

Social Constructism: Vygotsky, Bandura

1.3 Intelligence:

Concept and definition

Theories: Two-factor, Multifactor, Triarchic Theory (Robert Steinberg)

1.4 Creativity: Concept, Definition and Characteristics

1.5 Implications for Classroom Teaching and Learning

Unit 2: Learning Process and Motivation

2.1 Sensation: Definition and Sensory Process

2.2 Attention: Definition and Affecting Factors

2.3 Perception: Definition and Types

2.4 Memory, Thinking, and Problem Solving

2.5 Motivation: Nature, Definition and Maslow's Theory

Unit 3: Teaching Learning Process

- 3.1 Maxims of Teaching
- 3.2 Stages of Teaching: Plan, Implement, Evaluate, Reflect
- 3.3 Stages of Learning: Acquisition, Maintenance, Generalization
- 3.4 Learning Environment: Psychological and Physical
- 3.5 Leadership Role of Teacher in Classroom, School and Community

Unit 4: Overview of Assessment and School System

- 4.1 Assessment: Conventional meaning and constructivist perspective
- 4.2 'Assessment of Learning' and 'Assessment for Learning': Meaning and difference
- 4.3 Comparing and contrasting assessment, evaluation, measurement, test and examination
- 4.4 Formative and summative evaluation, Curriculum Based Measurement
- 4.5 Revisiting key concepts in school evaluation: filtering learners, marks, credit, grading, choice, alternate certifications, transparency, internal-external proportion, improvement option

Unit 5: Assessment: Strategies and Practices

- 5.1 Strategies: (Oral, written, portfolio, observation, project, presentation, group discussion, open book test, surprise test, untimed test, team test, records of learning landmark, cloze set/open set and other innovative measures) Meaning and procedure
- 5.2 Typology and levels of assessment items: Multiple choice, open ended and close ended; direct, indirect, inferential level
- 5.3 Analysis, reporting, interpretation, documentation, feedback and pedagogic decisions
- 5.4 Assessment of diverse learners: Exemptions, concessions, adaptations and accommodations;
- 5.5 School examinations: Critical review of current examination practices and their assumptions about learning and development; Efforts for exam reforms: Comprehensive and Continuous Evaluation (CCE), NCF (2005) and RTE (2009)

Engagement with the field as part of course as indicated below:

- Report submission: observation of children belonging to any three stages of development and describing applications of development in teaching-learning contexts
- Preparation of Self study report on individual differences among learners
- III. Prepare a leaflet for parents on better emotional management of children
- IV. Compilation of 5 CBM tools from web search in any one school subject
- V. Team presentation of case study on assessment outcome used for pedagogic decisions
- VI. Report on community participation in school assessment or study recent ASAR report to understand school independent assessment

Transaction and Evaluation

This concepts and theoretical precepts included in this course should be explained with reference to children with and without disabilities. The effort of transaction should be to enhance the understanding of how learning occurs and what are the suitable means of its assessment. Evaluation may be done by asking student-teachers to children with and without disabilities and present a report of the same.

Essential Readings

- Amin, N. (2002). Assessment of Cognitive Development of Elementary School Children. A Psychometric Approach, Jain Book Agency, New Delhi.
- Chauhan, S.S. (2013). Advanced Educational Psychology. Jain Book Agency, Delhi.
- King-Sears, E. M. (1994). Curriculum Based Assessment in Special Education. Singular Publishing Group, San Diego, CA.
- Panch, R. (2013). Educational Psychology: Teaching and Learning Perspective, McGraw Hill Education (India) Private Limited, New Delhi.
- Paul, P. (2009). Language and Deafness. Singular publication.
- Salvia, John, Ysseldyke, James, E. And Bolt, Sara. (2007). Assessment in Special and Inclusive Education. Houghton Mifflin Company, Boston.
- Whitcomb, S., & Merrell, K.W. (2012). Behavioral, Social, and Emotional Assessment of Children and Adolescents, Routledge, New York.
- Woolfolk, A., Misra, G., & Jha, A.K.(2012). Fundamentals of Educational Psychology, 11th edn, Pearson Publication, New Delhi.

Suggested Readings

- Geisinger, K.F. (2013). APA Handbook of Testing and Assessment in Psychology. Available at American Psychological Association, USA.
- Guskey, T. R., & Bailey. J (2000). Grading and Reporting. Thousnad Oaks, CA: Corwin King.
- Howell, K. W., & Nolet, V. (2000). Curriculum-Based Evaluation: Teaching and decision making. Scarborough, Ontario, Canada, Wadsworth.
- McMillan, J. H. (2001). Classroom Assessment: Principles and Practice for Effective Instruction. Allyn and Bacon, London.
- Nevo, D. (1995). School based Evaluation. Pergamon Publishing, Kidlington, Oxford.
- Salvia, J., & Ysseldyke. J.E.(1998). Assessment. (7th ed) Houghton Mifflin, Boston.

PEDAGOGY OF TEACHING SCIENCE

Course Code: A 4 (Part I)

Hours: 60

Contact

Marks: 100

Introduction

The course will help the student-teachers to generate their student's interest for learning science and develop a scientific attitude. It is designed to equip the student-teachers to teach science using innovative methods, techniques and teaching learning material to students with & without disabilities.

Objectives

After completing the course the student-teachers will be able to

Explain the role of science in day to day life and its relevance to modern society.

Describe the aims and objectives of teaching science at school level.

Demonstrate and apply skills to select and use different methods of teaching the content of sciences.

Demonstrate competencies of planning for teaching sciences, organizing laboratory facilities and equipment designing pupil centered teaching learning experiences.

Demonstrate skills to design and use various evaluation tools to measure learner achievement in sciences.

Unit 1: Nature and Significance of Science

- 1.1 Nature, Scope, Importance and Value of Science
- 1.2 Science As An Integrated Area of Study
- 1.3 Science and Modern Indian Society: Relationship of Science and Society
- 1.4 Impact of Science with Special Reference to Issues related with Environment, Industrialization and Disarmament
- 1.5 Role of Science for Sustainable Development

Unit 2: Planning for Instruction

- 2.1 Aims and Objectives of Teaching Science in Elementary and Secondary School
- 2.2 Bloom's Taxonomy of Educational Objectives and Writing Objectives in Behavioural Terms
- 2.3 Lesson Planning – Importance and Basic Steps. Planning Lesson for an Explanation, Demonstration, and Numerical Problem in Teaching of Sciences
- 2.4 Unit Planning – Format of A Unit Plan
- 2.5 Pedagogical Analysis: Meaning and Need. Guidelines for Conducting Pedagogical Analysis

Unit 3: Approaches and Methods of Teaching Sciences

- 3.1 Process Approach, Direct Experience Approach, Inductive-Deductive Approach
- 3.2 Lecture, Demonstration, Discussion, Problem-solving, Concept-mapping, Programmed Instruction, Team Teaching, Seminar, Computer Assisted Learning (CAL)
- 3.3 Project Method and Heuristic Method
- 3.4 Creating Different Situations of Learning Engagement: Group Learning, Individual Learning, Small Group, Cooperative (Peer-Tutoring, Jigsaw, etc.), Situated/Contextual Learning with reference to Children with Disabilities
- 3.5 Constructivist Approach and its Use in Teaching Science

Unit 4: Learning Resources with reference to Children with Disabilities for Teaching Science

- 4.1 Teaching Learning Aids – Need, Importance, Selection, Use and Classification of Aids Based on Type of Experience, Audio Visual Aids, Multimedia, Charts, and Models (Tactile and Visual)
- 4.2 Importance of Co-Curricular Activities-Science Club, Science Exhibition, Science Text Books-Characteristics and Significance with reference to Children with Disabilities
- 4.3 The Science Laboratory-Planning Organization of Lab, Storage, Record Keeping and Safety of Scientific Equipments with reference to Children with Disabilities
- 4.4 Aquarium, Vivarium – Role in Teaching with Setting & Maintaining
- 4.5 Museum, Botanical And Zoological Garden: Role In Teaching

Unit 5: Evaluation

- 5.1 Evaluation- Concept, Nature and Need
- 5.2 Norm Referenced & Criterion Referenced Evaluation, Comprehensive and Continuous Evaluation: Concept and Significance, Scholastic and Co-Scholastic Assessment
- 5.3 Tools and Techniques for Formative and Summative Assessments
- 5.4 Preparation of Diagnostic Test and Achievement Test
- 5.5 Adaptations of Evaluation Procedure With Reference To Children With Disabilities

Practical/ Field Engagement/Project Work

Any one of the following

- I. Pedagogical analysis of a unit from Science content.
Preparation of a multimedia presentation on a topic from Science content keeping students with disabilities in view.
Developing an Action Research Plan on a problem related to teaching and learning of Sciences to students with disabilities to students with disabilities.
- IV. Construction of a diagnostic test for unit along with a remedial plan.

- V. Comparative analysis of prescribed syllabus and textbooks of different Boards
Curricular innovations in respective subject areas
- VI. Curricular adaptations for teaching Sciences to students with disabilities.

Essential Readings

- Brown, R. (1978). Science instruction of visually Impaired Youth. New York: AFB.
- Buxton, A. C. (2010). Teaching Science in Elementary and Middle School. New Delhi: Sage Publications.
- Bybee, R. (2010b). The teaching of science: 21st-century perspectives. Arlington, VA: NSTA Press, USA.
- Fensham, P.J. (1994). The content of Science: A constructive Approach to its Teaching and Learning. Washington, D.C: The Falmer Press.
- Gupta, V. K. (1995). Teaching and Learning of Science and Technology. New Delhi: Vikas Publishing House Pvt. Ltd.
- Henninen, K. A. (1975). Teaching of Visually Handicapped, Ohio: Charles E. Merrill Publishing Company.
- Joshi, S. R. (2005). Teaching of Science. New Delhi: A.P.H Publishing Corporation.
- Kelley, P., & Gale, G. (1998). Towards Excellence: Effective education for students with vision impairments, Sydney: North Rocks Press.
- Lawson, E. A. (2010). Teaching Inquiry Science in Middle School, New Delhi: Sage Publications.
- Layton, D. (1989). Innovations in Science and Technology Education, New Delhi: Sterling Publishers.
- Mani, M. N. G. (1992). Techniques of teaching blind children, New Delhi: Sterling Publishers.
- Mukhopadhyay, S., Jangira, N. K., Mani, M.N. G., & Raychowdhary, N. (1987). Sourcebook for training teachers of visually impaired, New Delhi: NCERT.
- Murray, L. J. (1988). Basic Skills – Science, Boston: John Murrey.
- NCERT (1982). Teaching Science in secondary schools, New Delhi: NCERT.
- NIVH (1992). Handbook for the teachers for the visually handicapped, Dehradun
- Scholl, G.T. (1986). Foundations of education for blind and visually handicapped children and youth, New York: American Foundation for the blind.
- Sharma, R. C. (2005). Modern Science teaching, Delhi: Dhanpat Rai & Sons.
- Siddiqui, H. M. (2007). Teaching science, New Delhi: Balaji offset.
- Siddiqui, N.N., & Siddiqui, M. N. (1994). Teaching of science today & tomorrow, Delhi: Doaba House.
- Starin, A., & Sund, B. (1983). *Teaching science through discovery*. Ohio: Charles E. Merrill Publishing Company.

Tripathi, S. (2004). Teaching of Physical Science, Delhi: Dominant Publications.

UNESCO (1966). Source Book for Science Teaching, Paris: UNESCO.

Vaidya, N. (2003). Science Teaching in Schools, New Delhi: Deep & Deep Publishers.

Vanaja, M. (2006). Teaching of Physical Science, Hyderabad: Neelkamal Publications.

Suggested Readings

Gupta, S. K. (1983). Technology of Science Education, Delhi: Vikas Publishing House Pvt. Ltd.

Gupta, V. K. (1995). Readings in Science and Mathematics Education, Ambala: The Associated Press.

Mangal S. K., & Shubhra (2005). Teaching of Biological Sciences, Meerut: International Publishing House.

Rao, V.K. (2004). Science Education, APH Publishing Corpn. New Delhi.

PEDAGOGY OF TEACHING MATHEMATICS

Course Code: A 4 (Part II)

Contact Hours: 60

Marks: 100

Introduction

The course will help the student-teachers to generate their student's interest for learning maths and develop dispositions towards the subject. It is designed to equip the learners to teach maths using innovative methods, techniques and teaching learning material for children with & without disabilities.

Objectives

After completing the course the student-teachers will be able to

Explain the nature of Mathematics and its historical development with contribution of Mathematicians.

Describe the aims and objectives of teaching Mathematics at school level.

Demonstrate and apply skills to select and use different methods of teaching Mathematics.

- *Demonstrate competencies of planning for teaching Mathematics, organizing laboratory facilities and equipment designing pupil centered teaching learning experiences.*

Demonstrate skills to design and use various evaluation tools to measure learner achievement in Mathematics.

Unit 1: Nature of Mathematics

- 1.1 Meaning, Nature, Importance and Value of Mathematics
- 1.2 Axioms, Postulates, Assumptions and Hypothesis in Mathematics
- 1.3 Historical Development of Notations and Number Systems
- 1.4 Contribution of Mathematicians (Ramanujam, Aryabhata, Bhaskaracharya, Euclid, Pythagoras)
- 1.5 Perspectives on Psychology of Teaching and Learning of Mathematics- Constructivism, Enactivism, Vygotskyian Perspectives, and Zone of Proximal Development

Unit 2: Objectives and Instructional Planning in Mathematics

- 2.1 Aims and Objectives of Teaching Mathematics in Elementary and Secondary Schools
- 2.2 Bloom's Taxonomy of Educational Objectives and Writing Objectives in Behavioural Terms
- 2.3 Lesson Planning– Importance and Basic Steps. Planning Lesson of Arithmetic, Algebra and Geometry
- 2.4 Unit Planning – Format of A Unit Plan

- 2.5 Pedagogical Analysis: Meaning and Need and Procedure for Conducting Pedagogical Analysis. Classification of Content, Objective, Evaluation, etc

Unit 3: Strategies for Learning and Teaching Mathematics

- 3.1 Concept Formation and Concept Attainment: Concept Attainment Model for Learning and Teaching of Concepts
- 3.2 Learning By Exposition: Advanced Organizer Model
- 3.3 Methods of Teaching- Lecture, Discussion, Demonstration, Inductive-Deductive, Analytic-Synthetic, Problem-Solving, And Project
- 3.4 Techniques of Teaching Mathematics: Oral Work, Written Work, Drill-Work, Brain-Storming and Computer Assisted Instruction (CAI)
- 3.5 Creating Different Situations of Learning Engagement: Group Learning, Individual Learning, Small-Group, Cooperative (Peer-Tutoring, Jigsaw, etc.), and Situational/ Contextual Learning

Unit 4: Teaching-Learning Resources in Mathematics for Students with Disabilities

- 4.1 Mathematics Laboratory- Concept, Need, and Equipment for Setting Up a Mathematics Laboratory
- 4.2 Utilization of Learning Resources in Mathematics: Charts and Pictures, Weighing and Measuring Instruments, Drawing Instruments, Models, Concrete Materials, Surveying Instruments With Reference To Children With Disabilities
- 4.3 Bulletin Boards and Mathematics Club
- 4.4 Abacus, Cussionaire Rods, Fractional Discs, Napier Strips
- 4.5 Calculators, Computers, Smart Boards, Multimedia Presentations, and Special Aids and Appliances For Children With Disabilities

Unit 5: Assessment and Evaluation for Mathematics Learning

- 5.1 Assessment and Evaluation- Concept, Importance and Purpose
- 5.2 Error Analysis, Diagnostic Tests, Identification of Hard Spots and Remedial Measures
- 5.3 Tools and Techniques for Formative and Summative Assessments of Learner Achievement in Mathematics, Comprehensive and Continuous Evaluation in Mathematics
- 5.4 Preparation of Diagnostic and Achievement Test
- 5.5 Adaptations in Evaluation Procedure for Students With Disabilities

Practical/ Field Engagement/ Project Work

Any one of the following

Pedagogical analysis of a unit of content from secondary school Mathematics Syllabus

Preparation of a multimedia presentation on a topic with special reference to students with disabilities

Construction of a question paper based on current CBSE format/concerned State Board of education, preparing its Scoring key, and marking scheme

- IV. Analyzing errors committed by school children in Mathematics and preparing a remedial plan
- V. Developing an Action Research proposal for a problem related to teaching and learning of Mathematics with reference to students with disabilities

Transactions

Lecture cum demonstration, Workshops and Seminars

Essential Readings

- Carey, L.M. (1988). *Measuring and Evaluating School Learning*, Boston: Allyn and Bacon.
- Chambers, P. (2010). *Teaching Mathematics*, Sage Publication, New Delhi.
- Chapman, L.R. (1970). *The Process of Learning Mathematics*, New York: Pergamon Press.
- David, A.H., Maggie, M.K., & Louann, H.L. (2007). *Teaching Mathematics Meaningfully: Solutions for Reaching Struggling Learners*, Canada: Amazon Books.
- David, W. (1988). *How Children Think and Learn*, New York: Blackwell Publishers Ltd.
- Gupta, H. N., & Shankaran, V. (Ed.), (1984). *Content-Cum-Methodology of Teaching Mathematics*. NCERT, New Delhi.
- James, A. (2005). *Teaching of Mathematics*, New Delhi: Neelkamal Publication.
- Kumar, S. (2009). *Teaching of Mathematics*, New Delhi: Anmol Publications.
- Mangal, S.K. (1993). *Teaching of Mathematics*, New Delhi: Arya Book Depot.
- Mani, M. N. G. (1992). *Techniques of Teaching Blind Children*, New Delhi: Sterling Publishers.
- Mukhopadhyaya, S., Jangira, N. K., Mani, M.N. G., & Raychaudhary, N. (1987). *Sourcebook for Training Teachers of Visually Handicapped*, New Delhi: NCERT.
- Nemeth, A. (1973). *Nemeth Code for Mathematics and Scientific Notation*, Lovisville K: American Printing House.
- Siddhu, K.S. (1990). *Teaching of Mathematics*, New Delhi: Sterling Publishers.

Suggested Readings

- Keeley, P. K., & Cheryl, T. R. (2011). *Mathematics Formative Assessment*, Canada: Sage Publications.
- National Curriculum Framework*. (2005). NCERT, New Delhi: NCERT.
- National Curriculum Framework for Teacher Education*. (2009). NCTE, New Delhi.
- Teaching of Mathematics (ES-342), Blocks 1-4*. (2000). IGNOU, New Delhi.
- Text Books of Mathematics for Class-VI to X*. (2006). NCERT, New Delhi.

PEDAGOGY OF TEACHING SOCIAL SCIENCE

Course Code: A 4 (Part III)

Contact Hours: 60

Marks: 100

Introduction

This course explores the scope of social science. It develops competencies in designing lesson plans and evaluations tools. It addresses the knowledge and understanding of the methodologies, approaches to teach social sciences at secondary level and also modify and adapt content-area curricula, materials and techniques for students with disabilities. The course also focuses on various skills and competencies that teachers need to develop.

Objectives

After completing the course the student-teachers will be able to

Explain the concept, nature and scope of social science.

Develop competencies for designing unit and lesson plans, as well as tools of evaluation for social science teaching.

Develop skills in preparation and use of support materials for effective social science teaching.

Develop the ability to organize co-curricular activities and community resources for promoting social science learning.

Unit I: Nature of Social Sciences

- 1.1 Concept, scope and nature of social science
- 1.2 Difference between social sciences and social studies
- 1.3 Aims and objectives of teaching social science at school level
- 1.4 Significance of social science as a core subject
- 1.5 Role of social science teacher for an egalitarian society

Unit II: Curriculum and Instructional Planning

- 2.1 Organization of social science curriculum at school level
- 2.2 Instructional Planning: Concept, need and importance
- 2.3 Unit plan and Lesson plan: need and importance
- 2.4 Procedure of Unit and Lesson Planning
- 2.5 Adaptation of unit and lesson plans for children with disabilities

Unit III: Approaches to teaching of Social Science

- 3.1 Curricular approaches: a) Coordination, b) Correlational, c) Concentric, d) Spiral, e) Integrated, f) Regressive
- 3.2 Methods of teaching social science: Lecture, discussion, socialized recitation, source and project method

- 3.2.1. Devices and techniques of teaching social studies – Narration, description, illustration, questioning, assignment, field trip, story telling, Role play, Group and self study, programmed learning, inductive thinking, Concept mapping, expository teaching and problem solving
- 3.3 Accommodations required in approaches for teaching children with disabilities
- 3.4 Instructional material for teaching of social science: Time-lines & Genealogical charts, Maps & Globes, Use of different types of Boards(Smart boards, Chalk Board, Flannel Board), Tape-records, Radio, Television, Films & Filmstrips, Overhead Projector, Social science games and Power Point Presentation
- 3.5 Adaptations of material for teaching children with disabilities

Unit IV: Evaluation of Learning in Social Science

- 4.1 Purpose of evaluation in social science
- 4.2 Techniques of evaluating learner achievement in social Science: Written and Oral tests, Observation Tools, Work Samples, Portfolio
- 4.3 Assessment: tools and techniques of Continuous and Comprehensive Evaluation (CCE) for curricular and co-curricular subjects
- 4.4 Construction of teacher made test
- 4.5 Diagnostic testing and enrichment techniques for children with disabilities

Unit V: Social Science Teacher as a Reflective Practitioner

- 5.1 Being a reflective practitioner- use of action research
- 5.2 Developing an Action Research Plan for solving a problem in teaching-learning of Social science
- 5.3 Case study- Need and Importance for a School Teacher
- 5.4 Development of a Professional Portfolio/ Teaching Journal
- 5.5 Competencies for teaching Social science to children with disabilities

Transaction

The student-teachers should be encouraged to read chapters and articles. There may be quizzes, seminars, field trips, lectures, demonstrations, school visits and observations to teach this course.

Course Work/ Practical/ Field Engagement

- Prepare a unit of social science content for a given child with disabilities
- Develop an Action Research Plan on a problem related to teaching and learning in Social Science
- Adapt teaching learning materials for a child with disabilities
- Develop questions and achievement tests in social science
- Organize activities like quiz, mock-parliament, field trips, exhibitions and any other co-curricular activities in schools

Essential Readings

- Aggarwal, J. C. (2008). Principles, methods & techniques of teaching. UP: Vikas Publishing House Pvt Ltd.
- Batra, P. (2010). Social Science Learning in Schools Perspective and Challenges, Sage Publications Pvt. Ltd; Pap/Com edition.
- Chauhan, S. S. (2008). Innovations in teaching learning process. UP: Vikas Publishing House Pvt Ltd.
- Dhand, H. (2009). Techniques of Teaching. New Delhi: APH Publishing Corporation.
- Duplass, J. A. (2009). Teaching elementary social studies. New Delhi: Atlantic Publishers.
- Mangal, U. (2005). Samajik Shikshan, Arya Book Depot, New Delhi.

Suggested Readings

- Aggarwal, J.C. (2008). Teaching of social studies: A practical approach. (4th ed). UP: Vikas Publishing House Pvt Ltd.
- George, A. M., & Madam, A. (2009). *Teaching Social Science in Schools: NCERT'S New Textbook Initiative*.
- Mangal, S.K. (2004). Teaching of Social Science, Arya Book Depot, Delhi.
- Rai, B.C. (1999). Methods of Teaching Economics, Prakashan Kendra, Lucknow.
- Sharma, R.A. (2008). Technological foundation of education. Meerut: R.Lall Books Depot.
- Sharma, R.N. (2008). Principles and techniques of education. Delhi: Surjeet Publications.
- Singh, Y.K. (2009). Teaching of history: Modern methods. New Delhi: APH Publishing Corporation.
- Stone, R. (2008). Best Practices for Teaching Social Studies: What Award-Winning Classroom Teachers Do, Corwin, CA.

PEDAGOGY OF TEACHING HINDI

PEDAGOGY OF TEACHING HINDI

Course Code: A 5 (Part IV)

Credits: 04

Contact Hours: 60 (६० घंटे)

Marks: 100

पाठ्यक्रम के उद्देश्य — प्रस्तुत पाठ्यक्रम द्वारा विद्यार्थियों इस योग्य होंगे कि —

- व्यक्ति तथा समाज के जीवन और विकास में भाषा के योगदान से परिचित होंगे।
- मूलभूत भाषा कौशलों और भाषा अधिगम में उनकी भूमिका का अनुभव करेंगे।
- इकाई नियोजन और पाठ योजना की प्रक्रिया में कुशल होंगे।
- हिन्दी शिक्षण के विशिष्ट व्यावहारिक उद्देश्यों के निर्धारण और लेखन में सक्षम होंगे।
- हिन्दी शिक्षण के अधिगम लक्ष्यों की प्राप्ति के लिए प्रयोज्य शिक्षण विधियों का प्रयोग करेंगे।
- हिन्दी शिक्षण के उद्देश्यों की सहज प्राप्ति के लिए सहायक उपकरणों के निर्माण और उपयोग में दक्ष होंगे।
- भाषा अधिगम में सतत एवं व्यापक मूल्यांकन प्रविधि के उपयोग कुशलतापूर्वक करेंगे।
- भाषा अधिगम में विद्यार्थियों की कठिनाइयों के निराकरण के लिए क्रियात्मक अनुसन्धान का प्रयोग करेंगे।
- चिन्तन दैनन्दिनी और पॉर्टफोलियो निर्माण की प्रविधि का उपयोग करेंगे।

पाठ्यवस्तु

इकाई १ — भाषा, हिन्दी भाषा की प्रकृति और प्रयोज्यता।

- १.१ भाषा का प्रत्यय और उपयोगिता।
- १.२ बोली, विभाषा और मानक भाषा का प्रत्यय।
- १.३ शिक्षा, समाज, व्यापार, राजनीति, शोध एवं विकास में भाषा का योगदान।
- १.४ हिन्दी भाषा का नामकरण, संस्कृत से हिन्दी के उद्भव की प्रक्रिया।
- १.५ विश्वभाषा और भविष्य भाषा के रूप में हिन्दी का विकास का आकलन।
- १.६ मूल-भूत भाषा कौशलों — श्रवण, वाचन, पठन और लेखन का परिचय।

इकाई २ — पाठ्यवस्तु संवर्धन

- २.१ हिन्दी साहित्य का सामान्य परिचय।
- २.२ हिन्दी गद्य साहित्य की परम्परागत विधाएँ — कहानी, नाटक और महाकाव्य।
- २.३ हिन्दी गद्य साहित्य की आधुनिक विधाएँ — उपन्यास, यात्रा विवरण, जीवनी, आत्मकथा और संस्मरण।
- २.४ हिन्दी व्याकरण में उर्दू, अंग्रेज़ी और संस्कृत से समाविष्ट प्रत्यय।
- २.५ माध्यमिक स्तर पर हिन्दी पाठ्यक्रम में हुए परिवर्तनों का आकलन।

इकाई ३ — भाषा अधिगम की प्रकृति और पाठ नियोजन

- ३.१ माध्यमिक स्तर पर हिन्दी शिक्षण के लक्ष्य और उद्देश्य।

- ३.२ इकाई नियोजन का प्रत्यय, इसका महत्व और निर्माणविधि।
- ३.३ पाठयोजना का परिचय, उपयोग और महत्व।
- ३.४ पाठयोजना के चरण और उनका क्रियान्वयन।
- ३.५ हिन्दी शिक्षण के ज्ञानात्मक, बोधात्मक, कौशलात्मक और रूचिगत उद्देश्यों का निर्धारण।
- ३.६ विशिष्ट उद्देश्यों का व्यावहारिक शब्दावली में लेखन।
- ३.७ पाठ योजना के संरचनात्मक उपागम का परिचय और अभ्यास।

इकाई ४ — हिन्दी की विविध विधाओं के शिक्षण की विधियों का परिचय और उपयोग

- ४.१ माध्यमिक कक्षाओं में गद्य शिक्षण की उपयोगिता।
- ४.२ गद्य शिक्षण की अर्थबोध, व्याख्या, विश्लेषण और संयुक्त विधि का परिचय और इनकी समीक्षा।
- ४.३ माध्यमिक कक्षाओं के पाठ्यक्रम में पद्य के समावेश की उपयोगिता।
- ४.४ पद्य शिक्षण की शब्दार्थ कथन, खण्डान्वय, व्यास और समीक्षा विधि का परिचय और इनकी उपयुक्तता का आकलन।
- ४.५ माध्यमिक स्तर पर व्याकरण शिक्षण की आवश्यकता और उपयोगिता।
- ४.६ व्याकरण शिक्षण की निगमन, आगमन, भाषासंसर्ग और पाठ्य-पुस्तक विधियों का मूल्यांकन।

इकाई ५ — भाषा अधिगम-शिक्षण में सहायक सामग्रियों का प्रयोग

- ५.१ शिक्षण उपकरणों का सन्दर्भ, महत्व और लाभ।
- ५.२ अधिगम-शिक्षण के दृश्य उपकरणों के प्रकार।
- ५.३ दृश्य उपकरणों — श्यामपट्ट, चार्ट, नक्शा, मानचित्र, प्रतिरूप, कार्यशील प्रतिरूप और फ्लैश कार्ड की प्रयोग विधि।
- ५.४ श्रव्य उपकरणों — कॉम्पैक्ट डिस्क व कैसेट्स के प्रयोग की विधि और अभ्यास।
- ५.५ मुद्रित श्रव्य उपकरणों — अखबार, पत्रिकाओं और पुस्तकों का सहायक उपकरणों के रूप में प्रयोग।
- ५.६ वैद्युदण्विक उपकरणों — टेलीविजन, कम्प्यूटर और विश्वजाल के सहायक उपकरणों के रूप में प्रयोग की विधि और उपयोगिता।
- ५.७ भाषा अधिगम में भाषा प्रयोगशाला के प्रयोग की विधि और समीक्षा।

इकाई ६ — भाषा अधिगम के मूल्यांकन की प्रविधि

- ६.१ मूल्यांकन की संकल्पना, उद्देश्य और महत्व।
- ६.२ सतत एवं व्यापक मूल्यांकन का सन्दर्भ।
- ६.३ लेखन, पठन, श्रुतलेख, सुलेख, तीव्रलेखन, त्रुटिमुक्त लेखन, आशुभाषण और काव्यपाठ का सतत एवं व्यापक मूल्यांकन प्रविधि द्वारा मूल्यांकन।
- ६.४ कक्षागत पाठ्यसहगामी गतिविधियों — गीत, अभिनय, संवाद, क्रियाकलाप और नेतृत्व के गुणों का सतत एवं व्यापक मूल्यांकन प्रविधि द्वारा मूल्यांकन।
- ६.५ विद्यार्थियों के भाषा अधिगम का संचयीवृत्त बनाना।

इकाई ७ — चिन्तनशील साधक के रूप में शिक्षक

- ७.१ अनुवर्ती चिन्तन की आवश्यकता और महत्व।
- ७.२ चिन्तन दैनन्दिनी और पोर्टफोलियो बनाना।

- ७.३ विद्यार्थियों की अधिगम समस्याओं के निदान और समाधान के लिए क्रियात्मक अनुसन्धान का प्रयोग।
- ७.४ पाठ्यक्रम, सहायक सामग्री और पाठ्यविधियों का आलोचनात्मक विवेचन।
- ७.५ पाठ्यक्रम, सहायक सामग्री और पाठ्यविधियों पर विद्यार्थियों और अभिभावकों की प्रतिक्रियाओं का संग्रह।

प्रायोगिक कार्य –

- आधुनिक भाषा के रूप में हिन्दी के गुणों और स्थिति का अनुसन्धान विवरण।
- हिन्दी शिक्षण की किन्ही दो अधनूतन विधियों का परिचय एवं इनके उपयोग की तुलनात्मक समीक्षा।
- हिन्दी शिक्षण के श्रवण, वाचन और लेखन अधिगम के सटीक मूल्यांकन में सतत एवं व्यापक मूल्यांकन की प्रविधि के उपयोग का विवरण।
- चिन्तन दैनन्दिनी, पोर्टफोलियो और आलोचनात्मक विवरणी के उपयोग की समीक्षा और इनकी प्रतिकृति का प्रस्तुतिकरण।

मूल्यांकन योजना –

मूल्यांकन बिन्दु	कक्षा परीक्षा	प्रायोगिक कार्य	पोर्टफोलियो	उपस्थिति	सत्रान्त परीक्षा
प्रदेय अंक	१०	१०	०५	०५	७०

सन्दर्भ पुस्तकें –

- हिन्दी शिक्षण : अभिनव आयाम, डॉ. श्रुतिकान्त पाण्डेय, एक्सिस पब्लिकेशंस, दरियागंज, नई दिल्ली, २०१०.
- हिन्दी शिक्षण, उमा मंगल, आर्य बुक डिपो करोल बाग, नई दिल्ली, २००५.
- हिन्दी शिक्षण, डॉ. रामशकल पाण्डेय, विनोद पुस्तक मन्दिर, आगरा, २००५.
- हिन्दी साहित्य का इतिहास, आचार्य रामचन्द्र गुप्त, राजकमल प्रकाशन, नई दिल्ली, २००६
- हिन्दी शिक्षण, रमन बिहारी लाल, रस्तोगी प्रकाशन, मेरठ, २००२.
- हिन्दी शिक्षण, सावित्री सिंह, इन्टरनेशनल पब्लिशिंग हाउस, मेरठ, २००४

PEDAGOGY OF TEACHING ENGLISH

Course Code: A5 (Part V)

Contact Hours: 60

Marks: 100

Introduction

This course will enable the student-teachers to gain a strong knowledge base in nature of English language & literature, instructional planning and evaluation. It will help in applying theory to practice to design your own materials and plan lessons in preparation for teaching real classes. The course offers you the opportunity to explore in-depth aspects of English and to find out about the approaches and current practices of language teaching in relation to Indian and international contexts. The course also equips you with analytical and investigative skills and provides a foundation in issues related to English language teaching, second language pedagogy and language acquisition.

Objectives

After completing the course the student-teachers will be able to

Explain the principles of language teaching, and evolution and trends in English literature.

Prepare an instructional plan in English.

Adapt various approaches and methods to teach English language.

Use various techniques to evaluate the achievement of the learner in English.

Unit I: Nature of English Language & Literature

- 1.1 Principles of Language Teaching
- 1.2 Language Proficiency: Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP)
- 1.3 English Language in the school context: An Evolutionary Perspective
- 1.4 Current Trends in Modern English Literature in Indian context
- 1.5 Teaching as second language in Indian context.

Unit II: Instructional Planning

- 2.1 Aims and objectives of Teaching English at different stages of schooling
- 2.2 Instructional Planning: Need and Importance
- 2.3 Unit and lesson plan: Need and Importance
- 2.4 Procedure of Unit and Lesson Planning
- 2.5 Planning and adapting units and lessons for children with disabilities

Unit III: Approaches and Methods of Teaching English

- 3.1 Difference between an approach and a method

- 3.2 Task based approach, co-operative learning, language across curriculum, communicative language teaching, Bilingual, Eclectic and Constructive approach
- 3.3 Method Teaching of Prose, Poetry, Drama, Grammar and Vocabulary- i) Translation method. ii) Structural – Situational method. iii) Direct method
- 3.4 Development of four basic language skills: Listening, Speaking, Reading, and Writing
- 3.5 Accommodation in approaches and techniques in teaching children with disabilities

Unit IV: Instructional Materials

- 4.1 Importance of instructional material and their effective use
- 4.2 The use of the instructional aids for effective teaching of English: Smart boards, Chalk Board, Flannel Board, Pictures/ Picture-cut-outs, Charts, Tape-records, Radio, Television, Films & Filmstrips, Overhead Projector, Language Laboratory, Language games, reading cards, Worksheets, Handouts, and Power Point Presentation
- 4.3 Construction of a teacher made test for English proficiency
- 4.4 Teaching portfolio
- 4.5 Adaptations of teaching material for children with disabilities

Unit V: Evaluation

- 5.1 Evaluation - Concept and Need
- 5.2 Testing Language skills and Language elements (Vocabulary, Grammar and Phonology)
- 5.3 Adaptation of Evaluation Tools for Children with Disabilities
- 5.4 Individualized assessment for Children with Disabilities
- 5.5 Error analysis, Diagnostic tests and Enrichment measures

Transaction

This course should be taught through a series of workshops, seminars and presentations. Lectures, demonstrations and discussions for theory based topics. Students should be encouraged to use instructional material in their practice of teaching lessons. Adaptations in pedagogy, material and evaluation should be taught through workshops and specific case studies

Course Work/ Practical/ Field Engagement

- Design teaching programme based on error analysis
- Develop an Action Research Plan for measuring the effectiveness of a given teaching approach in English
- Develop work sheet (interactive including language games)
- Prepare worksheets to enrich vocabulary among secondary students with disabilities
- Develop lesson plans for the teaching of prose and poetry
- Critically analyze any one poem or essay of a well known poet or writer

Essential Readings

- Allen, H., & Cambell, R. (1972). Teaching English as second Language, McGraw Hill, New York.
- Bharthi, T., & Hariprasad, M. (2004). Communicative English, Neelkamal Publications, Hyderabad.
- Bhatia, K.K. (2006). Teaching and Learning English as a Foreign Language. Kalyani Publishers, New Delhi.
- Grellet, F.(1980). Developing Reading Skills, Cambridge University Press, New York.
- IGNOU CTE – 02 Certificate in Teaching of English (1989). The Structure of English, IGNOU, New Delhi.
- IGNOU EEG – 02 Elective Course in English (1989). The Structure of Modern English Blocks (1 to 7), IGNOU, New Delhi.

Suggested Readings

- Agnihotri, R.K., & Khanna, A.L. (Ed.) (1996). English Grammar in context, Ratnasagar, Delhi.
- Bhatia, K.K., & Kaur, N. (2011). Teaching and Learning English as a Foreign Language. Ludhiana: Kalyani Publishers.
- Bindra, R. (2005). Teaching of English. Jammu: Radha Krishan Anand and Co.
- Brumfit, C.J., & Johnson (Ed.) (1979). The communicative Approach to Language Teaching, Oxford University Press, Oxford.
- Bryne, D. (1988). Teaching Writing Skills, Longman, England.
- Krashen, D. (1992). Principles and Practice in Second Language Acquisition, Pergamum Press Oxford.
- Krishna Swamy (2003). Teaching English: Approaches, Methods and Techniques, Macmillan Publication, New Delhi.
- Sachdeva, M. S. (2007). Teaching of English. Patiala: Twenty First Century Publications.
- Sahu, B. K. (2004). Teaching of English. Ludhiana: Kalyani Publishers.
- Shaik, M. & Gosh, R.N. (2005). Techniques of Teaching English, Neelkamal Publications, Hyderabad.
- Sharma, P. (2011). Teaching of English: Skill and Methods. Delhi: Shipra Publication.

INCLUSIVE EDUCATION

Course Code: B 6

Contact Hours: 30

Marks: 50

Introduction

The course is designed to develop an understanding about inclusive education and addressing diversity in the mainstream classroom. It is also formulated in a way that the learners will know the pedagogical practices and recognises ways in which different stakeholders can collaborate for the success of inclusive education.

Objectives

After completing the course the student-teachers will be able to

Explain the construct of inclusive education & the progression from segregation towards valuing & appreciating diversity in inclusive education.

Explicate the national & key international policies & frameworks facilitating inclusive education.

Enumerate the skills in adapting instructional strategies for teaching in mainstream classrooms.

Describe the inclusive pedagogical practices & its relation to good teaching.

Expound strategies for collaborative working and stakeholders support in implementing inclusive education.

Unit 1: Introduction to Inclusive Education

5 Hours

- 1.1 Marginalisation vs. Inclusion: Meaning & Definitions
- 1.2 Changing Practices in Education of Children with Disabilities: Segregation, Integration & Inclusion
- 1.3 Diversity in Classrooms: Learning Styles, Linguistic & Socio-Cultural Multiplicity
- 1.4 Principles of Inclusive Education: Access, Equity, Relevance, Participation & Empowerment
- 1.5 Barriers to Inclusive Education: Attitudinal, Physical & Instructional

Unit 2: Policies & Frameworks Facilitating Inclusive Education

5 Hours

- 2.1 International Declarations: Universal Declaration of Human Rights (1948), World Declaration for Education for All (1990)
- 2.2 International Conventions: Convention against Discrimination (1960), Convention on Rights of a Child (1989), United Nations Convention of Rights of Persons with Disabilities (UNCRPD) (2006)
- 2.3 International Frameworks: Salamanca Framework (1994), Biwako Millennium Framework of Action (2002)
- 2.4 National Commissions & Policies: Kothari Commission (1964), National Education Policy (1968), National Policy on Education (1986), Revised National Policy of

Education (1992), National Curricular Framework (2005), National Policy For Persons With Disabilities (2006)

2.5 National Acts & Programs: IEDC (1974), RCI Act (1992), PWD Act (1995), National Trust Act (1999), SSA (2000), RTE (2006), RMSA (2009), IEDSS (2013)

Unit 3: Adaptations Accommodations and Modifications

7 Hours

- 3.1 Meaning, Difference, Need & Steps
- 3.2 Specifics for Children with Sensory Disabilities
- 3.3 Specifics for Children with Neuro-Developmental Disabilities
- 3.4 Specifics for Children with Loco Motor & Multiple Disabilities
- 3.5 Engaging Gifted Children

Unit 4: Inclusive Academic Instructions

8 Hours

- 4.1 Universal Design for Learning: Multiple Means of Access, Expression, Engagement & Assessment
- 4.2 Co-Teaching Methods: One Teach One Assist, Station-Teaching, Parallel Teaching, Alternate Teaching & Team Teaching
- 4.3 Differentiated Instructions: Content, Process & Product
- 4.4 Peer Mediated Instructions: Class Wide Peer Tutoring, Peer Assisted Learning Strategies
- 4.5 ICT for Instructions

Unit 5: Supports and Collaborations for Inclusive Education

5 Hours

- 5.1 Stakeholders of Inclusive Education & Their Responsibilities
- 5.2 Advocacy & Leadership for Inclusion in Education
- 5.3 Family Support & Involvement for Inclusion
- 5.4 Community Involvement for Inclusion
- 5.5 Resource Mobilisation for Inclusive Education

Practical & Field Engagement

- I. Visit Special Schools of any two Disabilities & an Inclusive school & write observation report highlighting pedagogy
- II. Prepare a Checklist for Accessibility in Mainstream Schools for Children with Disabilities
- III. Design a Poster on Inclusive Education
- IV. Prepare a Lesson Plan on any one School subject of your choice using any one Inclusive Academic Instructional Strategy

Transactions

Group discussions following videos and visits. Debate for Inclusion vs. Segregation & Self study for legislations and frameworks

Suggested Readings

- Bartlett, L. D., & Weisentein, G. R. (2003). *Successful Inclusion for Educational Leaders*. New Jersey: Prentice Hall.
- Chaote, J. S. (1991). *Successful Mainstreaming*. Allyn and Bacon.
- Choate, J. S. (1997). *Successful Inclusive Teaching*. Allyn and Bacon.
- Daniels, H. (1999) . *Inclusive Education*. London: Kogan.
- Deiner, P. L. (1993). *Resource for Teaching Children with Diverse Abilities*, Florida: Harcourt Brace and Company.
- Dessent, T. (1987). *Making Ordinary School Special*. Jessica Kingsley Pub.
- Gargiulo, R.M. *Special Education in Contemporary Society: An Introduction to Exceptionality*. Belmont: Wadsworth.
- Gartner, A., & Lipsky, D.D. (1997). *Inclusion and School Reform Transferring America's Classrooms*, Baltimore: P. H. Brookes Publishers.
- Giuliani, G.A. & Pierangelo, R. (2007). *Understanding, Developing and Writing IEPs*. Corwin press: Sage Publishers.
- Gore, M.C. (2004) . *Successful Inclusion Strategies for Secondary and Middle School Teachers*, Crowin Press, Sage Publications.
- Hegarty, S. & Alur, M. (2002). *Education of Children with Special Needs: from Segregation to Inclusion*, Corwin Press, Sage Publishers.
- Karant, P., & Rozario, J. ((2003). *Learning Disabilities in India*. Sage Publications.
- Karten, T. J. (2007). *More Inclusion Strategies that Work*. Corwin Press, Sage Publications.
- King-Sears, M. (1994). *Curriculum-Based Assessment in Special Education*. California: Singular Publications.
- Lewis, R. B., & Doorlag, D. (1995). *Teaching Special Students in the Mainstream*. 4th Ed. New Jersey: Pearson.
- McCormick, S. (1999). *Instructing Students who Have Literacy Problems*. 3rd Ed. New Jersey, Pearson.
- Rayner, S. (2007). *Managing Special and Inclusive Education*, Sage Publications.
- Ryandak, D. L. & Alper, S. (1996). *Curriculum Content for Students with Moderate and Severe Disabilities in Inclusive Setting*. Boston, Allyn and Bacon.
- Sedlak, R. A., & Schloss, P. C. (1986). *Instructional Methods for Students with Learning and Behaviour Problems*. Allyn and Bacon.
- Stow L. & Selfe, L. (1989). *Understanding Children with Special Needs*. London: Unwin Hyman.
- Turnbull, A., Turnbull, R., Turnbull, M., & Shank, D.L. (1995). *Exceptional Lives: Special Education in Today's Schools*. 2nd Ed. New Jersey: Prentice-Hall, Inc.

Vlachou D. A. (1997). *Struggles for Inclusive Education: An Ethnographic Sstudy*. Philadelphia: Open University Press.

Westwood, P. (2006). *Commonsense Methods for Children with Special Educational Needs - Strategies for the Regular Classroom*. 4th Edition, London Routledge Falmer: Taylor & Francis Group.

INTRODUCTION TO SENSORY DISABILITIES

Course Code: B 7

Contact Hours: 30

Marks: 50

Introduction

The course is designed to provide a basic understanding to the student-teachers about the nature and needs of different types of sensory disabilities. It will also equip them in undertaking screening, planning and instructing students with sensory disabilities.

Objectives

After completing this course, the student-teachers will be able to

Name the different types of sensory impairments and its prevalence and describe the process of hearing & implications of various types of hearing loss.

Explain the issues & ways to address challenges in educating students with hearing loss.

Describe nature, characteristics & assessment of students with low vision & visual impairment.

Suggest educational placement and curricular strategies for students with low vision & visual impairment.

Explicate the impact of deaf-blindness & practices for functional development.

Unit 1: Hearing Impairment: Nature & Classification

5 Hours

- 1.1 Types of sensory impairments: Single (Hearing Impairment & Visual Impairment) & Dual sensory impairment (Deaf-blindness)
- 1.2 Importance of hearing
- 1.3 Process of hearing & its impediment leading to different types of hearing loss
- 1.4 Definition of hearing loss, demographics & associated terminologies: deaf/ Deaf/ deafness/ hearing impaired/ disability/ handicapped
- 1.5 Challenges arising due to congenital and acquired hearing loss

Unit 2: Impact of Hearing Loss

5 Hours

- 2.1 Characteristics of learners with hearing loss and impact of different degrees of hearing impairment on communication
- 2.2 Language & communication issues attributable to hearing loss and need for early Intervention
- 2.3 Communication options, preferences & facilitators of individuals with hearing loss
- 2.4 Issues & measures in literacy development and scholastic achievement of students with hearing loss
- 2.5 Restoring techniques using human (interpreter) & technological support (hearing devices)

Unit 3: Visual Impairment-- Nature and Assessment**5 Hours**

- 3.1. Process of Seeing and Common Eye Disorders in India
- 3.2. Blindness and Low Vision--Definition and Classification
- 3.2. Demographic Information--NSSO and Census 2011
- 3.4. Importance of Early Identification and Intervention
- 3.5. Functional Assessment Procedures

Unit 4: Educational Implications of Visual Impairment**5 Hours**

- 4.1. Effects of Blindness--Primary and Secondary
- 4.2. Selective Educational Placement
- 4.3. Teaching Principles
- 4.4. Expanded Core Curriculum-- Concept and Areas
- 4.5. Commonly Used Low Cost and Advanced Assistive Devices

Unit 5: Deaf-blindness**10 Hours**

- 5.1 Definition, causes, classification, prevalence and characteristics of deaf-blindness
- 5.2 Effects and implications of deaf-blindness on activities of daily living & education
- 5.3 Screening, assessment, identification & interventional strategies of deaf-blindness
- 5.4 Fostering early communication development: Methods, assistive devices and practices including AAC
- 5.5 Addressing orientation, mobility & educational needs of students with deaf-blindness

Course Work/ Practical/ Field Engagement

- Develop a checklist for screening of children for hearing impairment
- Develop a checklist for screening of children for low vision
- Develop a checklist for screening of children for blindness
- Develop a checklist for screening of children for deaf blindness
- Journal based on observations of teaching children with sensory disabilities

Transactions

Visits, Observations, Videos and Interactions with Students with Disabilities

Essential Readings

- Bradford, L. J. & Hardy, W.G. (1979). Hearing and Hearing Impairment. New York: Grune and Stratton.
- Davis, H. & Silverman, S. R. (1970). Hearing and Deafness - Part I. Holt, London: Rinehart & Winston.
- Holbrook, C.M., & Koenig, A. J. (Eds.) (2000). Foundations of Education, Vol I: History and Theory of Teaching Children and Youths with Visual Impairments. (2nd ed); New York: AFB Press.

- Handbook on Deafblindness (2005). Sense International India. Retrieved online on 24/4/2015 from http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CDEQFjAC&url=http%3A%2F%2Fssa.nic.in%2Finclusive-education%2Ftraining-module-for-resource-teachers-for-disable-children%2FModule%25202%2520Deafblindness.pdf%2Fat_download%2Ffile&ei=LkY6VdGLOIKymAW604CgDg&usg=AFQjCNHxJc9OazS1f-TSI_HgQqJKxWjs_A&sig2=LIBWuGnYE0OLPtpK5FCHEg&bvm=bv.91427555,d.dGY
- Kelley, P., & Gale, G. (1998). Towards Excellence: Effective education for students with vision impairments. Sydney: North Rocks Press.
- Lowenfeld, B. (1973). Visually Handicapped Child in School and Society; American Foundation for the Blind; New York.
- Lynas, W. (2000). Communication options. In J. Stokes (Ed), Hearing Impaired Infants – Support in the first eighteen months. London: Whurr Publishers Ltd.
- Martin, F. N., & Clark, J.G. (2009). Introduction to Audiology. 10th ed. Boston: Pearson Education.
- Martin, F.N., & Clark, J.G. (2012). Introduction to Audiology. 11th ed. Boston: Pearson Education.
- National Institute for the Visually Handicapped (2015). Information Booklet on Visual Impairment in India, Dehradun: Government of India.
- Nerbonne, M. A., & Schow, R.L. (2002). Introduction to Audiologic Rehabilitation. Boston: Allyn and Bacon.
- Nerbonne, M. A., & Schow, R.L. (2013). Introduction to Audiologic Rehabilitation. 6th ed. Boston: Pearson Education.
- Northern, J. L., & Downs, M. P. (2002). Hearing in Children (5th Ed.). Philadelphia: Williams & Wilkins
- Prescod, S. V. (1978). Audiology Handbook of Hearing Disorders. New York: Van Nostrand Reinhold Company.
- Sataloff, R. T., & Sataloff, J. (2005). Hearing Loss. (4th Ed.) London: Taylor & Francis.
- Sims, L.G., Walter, G.G., & Whitehead, R.L. (1981). Deafness and Communication: Assessment and Training. Baltimore: Williams and Wilkins.
- Warren, D.H. (1994). Blindness and Children: An Individual Differences Approach. New York: Cambridge University Press.

Suggested Readings

- Auditory-Verbal International (1991). Auditory-verbal position statement. *Auricle* 4:11-12.
- Harp, B. (2006). *The handbook of literacy assessment and evaluation*, (3rd Eds). Norwood, M.A.: Christopher-Gordon Publishers, Inc.

Katz, J. (1985). *Handbook of Clinical Audiology*. (4th Ed.) Baltimore: Williams and Wilkins.

Loreman, T., Deppeler, J., & Harvey, D. (2005). *Inclusive education - A practical guide to supporting diversity in the classroom*. (2nd Eds.). U.K. Routledge.

Norris, G. H., & Romer, L.T. (1995). *Welcoming Students who are deafblind to typical classrooms*. U.S: Paul H. Brookes.

Pandey, R. S., & Advani, L. (1995). *Perspectives in Disability and Rehabilitation*. New Delhi: Vikas Publishing House Pvt. Ltd.

Proceedings from National Conference on Centenary for Work for the Blind in India (1987). All India Confederation of the Blind and Christoffel Blinden Mission; Delhi: R.K.Printers.

Scholl, G.T. (1986). *Foundations of Education for Blind and Visually Handicapped Children and Youth*. New York: American Foundation for the BLind.

Tucker, I., & Nolan, M. (1984). *Educational Audiology*. London: Croom Helm.

Tye-Murray, N. (1998). Intervention Plans for Children. In Tye-Murray N. (Eds) *Foundations of Aural Rehabilitation*. San Diego: Singular. p.381–413.

INTRODUCTION TO NEURO DEVELOPMENTAL DISABILITIES

Course Code: B 8

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

The course integrates relevant subject matter in the areas of Learning Disability, intellectual Disability and Autism Spectrum Disorder. This course will prepare preservice teachers to work with students with Neuro Developmental disabilities in inclusive and specialized settings. It fosters the acquisition of the broad-based knowledge and skills needed to provide effective educational programs for students with learning and behavior characteristics. The course emphasizes implications for educational and vocational programming, curriculum, and instruction.

Objectives

After completing the course the student-teachers will be able to

Discuss the characteristics and types of learning disability.

Describe the tools, areas of assessment and apply intervention strategies to enhance learning.

Explain the characteristics and types of Intellectual disability.

Describe the tools, areas of assessment and prepare and apply intervention strategies for independent living.

Explain the characteristics and types of Autism Spectrum Disorder.

Describe the tools, areas of assessment and apply intervention strategies.

Unit 1: Learning Disability: Nature, Needs and Intervention

- 1.1 Definition, Types and Characteristics
- 1.2 Tools and Areas of Assessment
- 1.3 Strategies for reading, Writing and Maths
- 1.4 Curricular Adaptation, IEP, Further Education,
- 1.5 Transition Education, Life Long Education

Unit 2: Intellectual Disability: Nature, Needs and Intervention

- 2.1 Definition, Types and Characteristics
- 2.2 Tools and Areas of Assessment
- 2.3 Strategies for Functional Academics and Social Skills
- 2.4 Assistive Devices, Adaptations, Individualized Education Plan, Person Centered Plan, Life Skill Education
- 2.5 Vocational Training and Independent Living

Unit 3: Autism Spectrum Disorder: Nature, Needs and Intervention

- 3.1 Definition, Types and Characteristics
- 3.2 Tools and Areas of Assessment
- 3.3 Instructional Approaches
- 3.4 Teaching Methods
- 3.5 Vocational Training and Career Opportunities

Transaction

This course should be taught through lectures, discussion, demonstrations, presentations and workshops. They should be given hands on training in assessments of specific needs of children, interpretation of test reports and develop strategies for classroom intervention

Course Work/ Practical/ Field Engagement

- Develop an Assessment Tool for a child with learning disability in the given area
- Prepare a transition plan from school to college for an LD Child
- Prepare a life skill curriculum
- Prepare a screening tool for children with Autism Spectrum Disorder
- Prepare teacher made test for functional assessment of a given child with ID/ Autism
- Plan an educational program on the basis of an assessment report of a child with ID/Autism

Essential Readings

- Accardo, P.J., Magnusen, C., & Capute, A.J. (2000). Autism: Clinical and Research Issues. York Press, Baltimore,
- American Psychiatric Association.(2000). Diagnostic and Statistical Manual of Mental Disorders (4th ed. TR). Washington DC.
- Bala, M.J. (2004). Methods of Teaching Exceptional Children, Discovery, New Delhi.
- Browning, R. E. (2004). Teaching Students with Behaviour and Serve Emotional Problems,

Suggested Readings

- Higgins, J. (2003) Practical Ideas that Really Work for Students with Dyslexia and Other Reading Disorders, PRO-ED, Austin.
- Moyes, R.A. (2010). Building Sensory Friendly Classrooms to Support Children with Challenging Behaviors: Implementing Data Driven Strategies, Sensory World, Texas.
- Pierangelo, R., & Giuliani G.A. (2003). Transition services in Special Education, Allyn & Bacon.
- Reddy G.L., & Rama, R. (2000). Education of Children with Special Needs, New Delhi - Discovery Pub.

- Simpson, R. L., & Myles, B. S. (2008). Educating Children and Youth with Autism: Strategies for Effective Practice. (2nd edition) Pro Ed. Texas.
- Smith, D.D. (2003). Introduction to Special Education Teaching in an Age of opportunity, Allyn & Bacon.
- Strichart, S. S. (1993). Teaching Study Strategies to Students with Learning Disabilities, Allyn & Bacon, Boston.
- Swady, E.R. (1989). Diagnosis & Correction of Reading, Difficulties, Allyn & Bacon, Boston.
- Taylor, B. (1988). Reading Difficulties: Instruction and Assessment, Random House, New York.
- Wong, B. Y. L. (1996) .The ABCs of learning disabilities (1st ed.) Academic Press, San Diego, CA.

INTRODUCTION TO LOCOMOTOR AND MULTIPLE DISABILITIES

Course Code: B 9

Contact Hours: 30

Marks: 50

Introduction

The course aims to develop understanding about planning effective educational programme and functional activities for students with locomotor and multiple disabilities. This course intends to develop required skills in teacher trainee to identify the children with locomotor and multiple disabilities and also plan an effective programme education as well as for creating awareness on these conditions. Teacher is also expected to plan an effective therapeutic and programme and also refer for medical intervention whenever if necessary.

Objectives

After completing the course the student-teachers will be able to

Identify the persons with Locomotor disabilities such as Cerebral Palsy, Amputees, Polio, Leprosy cured, Muscular dystrophies, Neural and spinal defects and Multiple disabilities.

Plan an effective programme for creating awareness about the persons with Locomotor disabilities and Multiple disabilities.

Plan an effective therapeutic and programme for the persons with Locomotor disabilities and Multiple disabilities and to refer for medical intervention if necessary.

Plan an effective educational programme and functional activities for the persons with Locomotor disabilities and Multiple disabilities.

Unit 1: Cerebral Palsy (CP)

- 1.1. CP: Nature, Types and Its Associated Conditions
- 1.2. Assessment of Functional Difficulties of CP including Abnormalities of Joints and Movements (Gaits)
- 1.3. Provision of Therapeutic Intervention and Referral of Children with CP
- 1.4. Implications of Functional Limitations of Children with CP in Education and Creating Prosthetic Environment in School and Home: Seating Arrangements, Positioning and Handling Techniques at Home and School
- 1.5. Facilitating Teaching-Learning of Children with CP in School, IEP, Developing TLM; Assistive Technology to Facilitate Learning and Functional Activities

Unit 2: Amputees, Polio, Spinal Cord Injuries Spina-bifida and Muscular Dystrophy

- 2.1. Definition, Meaning and Classification
- 2.2. Assessment of Functional Difficulties
- 2.3. Provision of Therapeutic Intervention and Referral

- 2.4. Implications of Functional Limitations for Education and Creating Prosthetic Environment in School and Home: Seating Arrangements, Positioning and Handling Techniques at Home and School
- 2.5. Facilitating Teaching-Learning: IEP, Developing TLM; Assistive technology

Unit 3: Multiple Disabilities and Other Disabling Conditions

- 3.1 Multiple Disabilities: Meaning and Classifications
- 3.2 Various Combinations of Multiple Disabilities and Associated Conditions Such as Epilepsy, Motor and Sensory Conditions
- 3.3 Other Disabling Conditions such as Leprosy Cured Students, Tuberous Sclerosis and Multiple Sclerosis
- 3.4 Implications of Functional Limitations for Education and Creating Prosthetic Environment in School and Home: Seating Arrangements, Positioning and Handling Techniques at Home and School
- 3.5 Facilitating Teaching-Learning: IEP, Developing TLM; Assistive technology

Course Work/ Practical/ Field Engagement (any one of the following)

Undertake a case study after identifying a child with cerebral palsy or a child with Multiple Disabilities. Assess the child's difficulties in activities of daily living and academic activities and develop an intervention plan.

Undertake a survey on 50 children with different disabilities and find out how many children are affected with cerebral palsy and multiple disabilities. Find out the causes of their disabling conditions and what difficulties these children are facing in attending their schools.

Essential Readings

Miller, F. and Bachrach, S.J. (2012). *Cerebral Palsy: A Complete Guide for Caregiving*. A Johns Hopkins Press Health Book.

Sarva Siksha Abhiyan. Module on Cerebral Palsy. http://ssa.nic.in/inclusive-education/training-module-for-resource-teachers-for-disable-children/Module%205%20Cerebral%20Palsy.pdf/at_download/file

Sarva Siksha Abhiyan . Module on Multiple Disabilities. http://ssa.nic.in/inclusive-education/training-module-for-resource-teachers-for-disable-children/Module%203%20Multiple%20Disability.pdf/at_download/file

IDENTIFICATION OF CHILDREN WITH VISUAL IMPAIRMENT AND ASSESSMENT OF NEEDS

Course Code: C 12

Contact Hours: 60

Marks: 100

Introduction

We cannot treat a visually impaired child as ‘a pair of young eyes’. We need to understand the whole child, including his feelings and needs. Having understood the psychological and sociological implications of visual impairment, the learners should be more empathetic to the needs of the visually impaired and address them appropriately in diverse educational settings. There are many eye conditions each with different educational and social implications. The infant must ‘see to learn’ and therefore a visually impaired infant must ‘learn to see’. The course will enable the trainees to be able to identify children who are at risk for visual impairment. The trainees will be able to develop the skills of doing functional vision assessment and enhance the residual vision. The course also focuses on needs and assessment of children with multiple disability and visual impairment.

Objectives

After completing the course student-teachers will be able to

Describe the structure of eye and common eye defects.

Explain the etiology of visual impairment.

Analyse the implications of visual impairment and identify their needs.

Develop skills to identify and assess children with visual impairment.

Describe the needs and develop skills to assess children with visual impairment and multiple disabilities (VIMD).

Unit 1: Anatomy and Physiology of Human Eye

- 1.1 Structure and Function of human eye
- 1.2 Normal vision development and process of seeing
- 1.3 Principles of refraction and refractive errors
- 1.4 Concept and definitions of blindness and low vision
- 1.5 Concept of visual acuity, visual field, depth perception and contrast sensitivity

Unit 2: Types of Visual Impairment and Common Eye Disorders

- 2.1 Loss of Visual acuity
- 2.2 Loss of Visual field
- 2.3 Colour vision defect and loss of contrast sensitivity
- 2.4 Refractive errors, Vitamin-A deficiency, Cataract, Glaucoma, Corneal ulcer, trachoma, Albinism, Retinal detachment, Retinitis pigmentosa, Retinopathy of prematurity, Cortical Visual Impairment, Optic Atrophy, Nystagmus, Amblyopia, and Macular degeneration

2.5 Educational implications of different Eye disorders

Unit 3: Implications of Visual Impairment and Needs of Visually Impaired

- 3.1 Psychosocial implications of visual impairment
- 3.2 Factors affecting implications of visual impairment: Age of onset, degree of vision, type of vision loss, prognosis, and socio economic status of the family
- 3.3 Effect of visual impairment on growth and development: Physical, Motor, Language, Socio-emotional, and Cognitive development
- 3.4 Educational needs of the visually impaired and need for expanded core curriculum
- 3.5 Implications of low vision and needs of children with low vision

Unit 4: Identification and Assessment of Visual Impairment

- 4.1 Interpretation of clinical assessment of vision
- 4.2 Functional assessment of vision: Concept, need and methods
- 4.3 Tools of functional assessment of vision and skills: Functional skills inventory for the blind (FSIB), Low Vision Assessment by Jill Keefe, Lea tests, and Portfolio assessment
- 4.4 Tools for psychological assessment of the visually impaired: Vithoba Paknikar Performance Test, A short Scale IQ measure for the visually impaired based on WISC-R, Adapted EPQ, Adapted Blind Learning Aptitude Test, Concept development for blind children, Reading Preference Test, Cornell Medical Index for Visually Handicapped Children
- 4.5 Report writing

Unit 5: Assessment of Learning Needs of Children with VIMD

- 5.1 Concept and definition of VIMD
- 5.2 Etiology of VIMD
- 5.3 Impact of VIMD on learning and development
- 5.4 Screening, identification, and assessment of Visually Impaired children with associated disabilities
- 5.5 Multidisciplinary assessment of Visually Impaired children with Associated Disabilities

Course Work/ Practical/ Field Engagement

- Present a seminar on implications of visual impairment on the personality of the visually impaired
- Prepare material on early indicators of visual impairment and prevention of visual impairment
- Carry out functional assessment of skills of a blind, a low vision, and a VIMD child and submit a report of their assessment

Essential Readings

- Barraga, N. C. (1980). Sequences of Visual Development. Austin: University of Texas.

- Bhan, S. & Swarup, S. (2010). Functional Skills Inventory for the Blind. Mumbai: National association for the blind.
- Bhandari, R. & Narayan J. (2009). Creating learning opportunities: a step by step guide to teaching students with vision impairment and additional disabilities, including deafblindness. India: Voice and vision.
- Hyvarinen, L. & Jacob N. (2011). What and how does this child see: assessment of visual functioning for development and learning. Finland: Vistest Ltd.
- Mukhopadhyay, S., Mani, M.N.G., Roy Choudary & Jangira, N.K. (1988). Source Book for Training Teachers of Visually Impaired. New Delhi: NCERT.
- Leat, S.J., Shute R.H., & Westall, C.A. (1999). Assessing children's vision: A handbook. Oxford: Butterworth-Heinemann.
- Mani, M.N.G. (2001). Reading Preference Test (REPT) for Children with Low Vision. Coimbatore: International Human Resource Development Centre for the Disabled.
- Mani, M.N.G. (1992). Concept development of blind children. Coimbatore: SRK Vidyalaya.
- Scholl, G. T. (Ed.) (1986). Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. New York: AFB Press.
- Singh, T.B. (1986). A short Scale I.Q Measure for the Visually Handicapped. Dehradun: NIVH.
- Singh, T.B. (1986). Eyssenck Personality Questionnaire (EPQ) for the Visually Handicapped. Dehradun: NIVH.
- Singh, T.B. (1986). Standardisation of Cornell Medical Index on Visually Handicapped children. Dehradun: NIVH.
- Singh, T.B & Sati, G. (1992). Use of Blind Learning Aptitude Test as a performance measure for the assessment of Visually Handicapped Children in India. Dehradun: NIVH.
- Warren, D.H. (1983). Blindness and Early Childhood Development. New York: AFB Press.

Suggested Readings

- Holbrook M. C. & Koenig A. J. (Eds.) (2000). Foundations of Education, Vol I: History and Theory of Teaching Children and Youths with Visual Impairments, (2nd Ed): New York: AFB Press.
- Kundu, C.L. (2000). Status of Disability in India, New Delhi, RCI.
- National Institute for the Visually Handicapped (1990). Handbook for Teachers of the Blind, Dehradun: NIVH.
- Punani, B., & Rawal, N. (1993). Handbook: Visual Impairment. New Delhi : Ashish Publishing House
- Bright Hub Education (2012). Identifying Students with Visual Impairment. Retrieved from <http://www.brighthubeducation.com/special-ed-visual-impairments/69240-early-signs-of-visual-impairment-in-a-child/>

CURRICULUM, ADAPTATION AND STRATEGIES FOR TEACHING EXPANDED CURRICULUM

Course Code: C 13

Contact Hours: 60

Marks: 100

Introduction

Curriculum is the heart of any educational system. As is the curriculum, so is the educative process. This course will provide basic understanding of the concept of curriculum approaches to curriculum development. The course content shows a strong commitment to the notion that children with visual impairment should have access to the regular core curriculum for which they need to learn an expanded core curriculum unique to visual impairment. Apart from that certain curricular adaptations and modifications are required to be done to enable the students to access visually oriented concepts. Adapted physical education and creative arts also form a part of this course of study.

Objectives

After completing the course student-teachers will be able to

Define curriculum, its types and explain its importance.

Demonstrate techniques of teaching functional academic skills.

Explain importance and components of independent living skills.

Explain curricular adaptations with reasonable accommodations.

Illustrate how physical education and creative arts activities can be adapted for the children with visual impairment.

Unit 1: Concept and Types of Curriculum

- 1.1 Concept, Meaning and Need for Curriculum
- 1.2 Curricular Approaches in Special Education – Developmental, Functional, Eclectic and Universal design for learning Approach
- 1.3 Types of Curriculum – need based, knowledge based, activity based, skill based and hidden curriculum
- 1.4 Curriculum Planning, Implementation and Evaluation; Role of Special teachers of the Visually Impaired
- 1.5 Core Curriculum and Expanded Core Curriculum- Meaning, Need and Components

Unit 2: Teaching Functional Academics Skills

- 2.1 Learning media assessment
- 2.2 Braille reading readiness
- 2.3 Techniques of teaching Braille
- 2.4 Techniques of Teaching print to children with low vision
- 2.5 Braille aids and devices, optical devices for print reading and writing

Unit 3: Teaching of Independent Living Skills

- 3.1 Independent living skills – Meaning, Importance, Components
- 3.2 Orientation and Mobility – need and importance, techniques of teaching mobility, sighted guide and pre-cane, cane techniques and mobility aids
- 3.3 Daily living skills – assessment of needs and techniques of teaching age appropriate daily living skills
- 3.4 Sensory efficiency – importance and procedures for training auditory, tactile, olfactory, gustatory, kinaesthetic senses and residual vision
- 3.5 Techniques of teaching social interaction skills, leisure and recreation skills and self - determination

Unit 4: Curricular Adaptation

- 4.1 Curricular adaptation – Need, Importance and Process
- 4.2 Reasonable accommodation – Need and Planning
- 4.3 Planning of lessons for teaching Expanded Core Curriculum – Individualized Education Program writing
- 4.4 Pedagogical Strategic – Cooperative learning, Peer tutoring, reflective teaching, multisensory teaching
- 4.5 Preparation of Teaching Learning Material for ECC – Reading Readiness kit, Flash Cards, Sensory Kits, and Mobility Maps

Unit 5: Curricular Activities

- 5.1 Curricular activities – Meaning and Need for Adaptation.
- 5.2 Adaptation of Physical education activities and Yoga
- 5.3 Adaptation of Games and Sports – both Indoor and Outdoor
- 5.4 Creative Arts for the children with visual impairment
- 5.5 Agencies/Organisations promoting – Sports, Culture and Recreation activities for the Visually Impaired in India – Indian Blind Sports Association, Chess Federation of India, Paralympic Committee of India, Abilympics, World Blind Cricket

Course Work/ Practical/ Field Engagement

- Prepare reading readiness material for pre-school children with visual impairment
- Preparation and presentation of a kit to develop sensory efficiency
- Select one chapter from a primary level text book of your choice and adapt it for learners with visual impairment
- Adapt one diagram and one map from secondary classes into non-visual format

Essential Readings

- Lowenfeld, B. (1971). Our blind children: Growing and learning with them, Springfield, Charles C. Thomas.
- Aggarwal, J.C. (2005). Curriculum development. Shipra Publication. Delhi

- Arora, V. (2005). *Yoga with visually challenged.*: Radhakrishna Publication, New Delhi
- Baratt, S. H. (2008). *The special education tool kit.* Sage Publication, New Delhi.
- Chapman, E. K. (1978). *Visually Handicapped Children and Young People.* Routledge and Kegan Paul, London.
- Cutter, J. (2006). *Independent Movement and travel in Blind Children.* IAP, North Carolina.
- Dickman, I.R. (1985). *Making life more liveable.* AFB, New York.
- Dodds, A. (1988). *Mobolity training for visually handicapped people.* Croom Helm. London.
- Jose, R. (1983). *Understanding Low Vision.* American Foundation for the Blind, New York.
- Kauffman, J.M., & Hallahan, D.P. (1981). *Handbook of Special Education.* Prentice Hall, New Delhi
- Kelly, A.V. (1997). *The curriculum: theory and practice.* Harper and Row, London.
- Lowenfeld, B. (1973). *The Visually Handicapped Child in School.* John Day Company, New York.
- Mangal, S. K. (2011) *Educating Exceptional Children: An Introduction to Special Education.* PHI Learning Pvt.Ltd., New Delhi.
- Mani, M. N. G. (1992). *Techniques of teaching blind children.* Sterling Publishers Pvt. Ltd., New Delhi.
- Mani, M. N. G. (1997). *Amazing Abacus.* S.R.K. Vidyalaya Colony, Coimbatore.
- Mason, H., & Stephen McCall, S.(2003) . *Visual Impairment – Access to Education for Children and Young people.* David Fulton Publishers, London.
- Mukhopadhyay, S., Mani, M.N.G., RoyChoudary, M., & Jangira, N.K. (1988). *Source Book for Training Teachers of Visually Impaired.* NCERT, New Delhi.
- Punani, B., & Rawal, N.(2000). *Handbook for Visually Impaired.* Blind Peoples' Association, Ahmedabad.
- Scholl, G. T. (1986). *Foundations of the education for blind and visually handicapped children and youth: Theory and Practice.* AFB Press, New York.
- Sharma, R. A. (2011). *Curriculum development and instruction.* R. Lall Book Depot, Meerut.
- Vijayan, P., & Gnaumi, V. (2010). *Education of children with low vision.* Kanishka Publication, New Delhi.
- Welsh, R., & Blasch, B. (1980). *Foundation Orientation & Mobility.* AFB, New York.

Suggested Readings

- Ashcroft, S. C., & Henderson, F. (1963). Programmed Instruction in Braille. Stanwick House, Pittsburgh.
- Barraga, N. C. (1986). 'Sensory Perceptual Development'.in: G.T. Scholl (ed.) Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press, New York.
- National Curriculum Framework .(2005). Position paper National focus group in Education of Children with Special needs. NCERT,New Delhi.
- Status of Disability in India. (2012). Rehabilitation Council of India, New Delhi.
- Hodapp, R. M. (1998). Developmental and disabilities: Intellectual, sensory and motor impairment. Cambridge Uni. Press, New York.
- The expanded Core Curriculum. (2013). Retrieved from [http: // www.afb.org](http://www.afb.org)
- Wright, L. (2013). The Skills of Blindness: What should students know and when students know. Retrieved from [http:// www.lofob.org](http://www.lofob.org)

PRACTICUM

I Year

E 1: Cross disability & inclusion

Hours: 10

Marks: 50

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Settings	Specific Activities	Hrs. (60)	Marks	Submissions
1	1.Classroom observation	1.VI 2.Other than VI 3.Any disability	1.Special School 2.Minimum three special schools 3. Inclusive schools	1.Learners will observe students in different educational settings, curriculum transaction, classroom interaction in curricular and co-curricular areas and submit a report	10 10 10	25	
	2. Learning of Braille	VI and Deaf-blind	College	2.Introduction to Bharati/ Hindi or Regional Braille	30	25	

E 2: Disability Specialisation**Hours: 60****Marks: 50**

Sl. No.	Tasks for the Student-teachers	Educational Settings	Disability Focus	Specific Activities	Hrs.	Marks	Submissions
1.1	Learning of Braille	College	VI	1. Bharati Hindi or Regional Braille 2. Braille Mathematical sign for: Numeric indicator, basic operations, simple fraction and brackets	30 Hours 15 Hours	25 25	
1.2	Learning the use of Assistive Devices	College	VI	Taylor Frame: Basic Operation using arithmetic and algebric types	15 Hours		

B.Ed.Spl.Ed.(VI) 2nd Year

GUIDANCE & COUNSELLING

Course Code: B 10(A)

Contact Hours: 30

Marks: 50

Objectives

After completing this course the student-teachers will be able to

Apply the skills of guidance and counselling in classroom situations.

Describe the process of development of self-image and self-esteem.

Appreciate the types and issues of counselling and guidance in inclusive settings.

Unit 1: Introduction to Guidance and Counselling

- 1.1 Guidance and Counselling: Definition and Aims
- 1.2 Areas of Guidance and Counselling
- 1.3 Core Conditions in Counselling
- 1.4 Skills and Competencies of a Counsellor
- 1.5 Role of Teacher in Guiding and Counselling Students with Special Needs

Unit 2: Enhancing Self Image and Self Esteem

- 2.1 Concept of Self as Human
- 2.2 Understanding of Feelings and Changes
- 2.3 Growth to Autonomy
- 2.4 Personality Development
- 2.5 Role of Teacher in Developing Self-Esteem in Children

Unit 3: Guidance and Counselling in Inclusive Education

- 3.1 Current Status with reference to Indian School
- 3.2 Types of Counselling: Child-Centred, Supportive, Family
- 3.3 Guidance in Formal and Informal Situations: Within and Outside Classroom, Vocational Guidance
- 3.4 Group Guidance: Group Leadership Styles and Group Processes
- 3.5 Challenges in Group Guidance

Practicum/ Field engagement

- Counselling and report writing on a selected case II. Simulation of a parent counselling session
- III. Report of critical observation of a given counselling session

Transaction

The transaction for this course should be done with a perspective to enhance in the student-teachers the ability to become a “People-helper”. They should be able to appreciate the role of a guide and counsellor in the school setting.

Essential Readings

- Naik, P.S. (2013). *Counselling Skills for Educationists*. Soujanya Books, New Delhi.
- Nayak, A.K. (1997). *Guidance and Counselling*. APH Publishing, Delhi.
- Rao, V. K., & Reddy, R.S. (2003). *Academic Environment: Advice, Counsel and Activities*. Soujanya Books, New Delhi.
- Shah, A. (2008). *Basics in Guidance and Counselling*. Global Vision Publishing House.
- Sharma, V.K. (2005). *Education and Training of Educational and Vocational Guidance*. Soujanya Books, New Delhi.

Suggested Readings

- Kapunan, R.R. (2004). *Fundamentals of Guidance and Counselling*. Rex Printing Company, Phillipines.
- Pal, O.B. (2011). *Educational and Vocational Guidance and Counselling*. Soujanya Books, New Delhi.

EARLY CHILDHOOD CARE AND EDUCATION

Course Code: B 10(B)

Contact Hours: 30

Marks: 50

Introduction

The course is designed to provide the student-teachers with an insight into developmental milestones of typical children. This will enable the learners to understand deviations and strategies to address them in the critical phase of development. It will also help the learners understand the importance of transitions and its requirements.

Objectives

After undertaking the course the student-teachers will be able to

- Explain the biological & sociological foundations of early childhood education.*
- Describe the developmental systems approach and role responsibilities of interdisciplinary teams for early education of children with disabilities.*
- Enumerate the inclusive early education pedagogical practices.*

Unit 1: The Early Years: An Overview

- 1.1 Facts about Early Childhood Learning & Development
- 1.2 Neural Plasticity
- 1.3 Critical Periods of Development of Motor, Auditory, Visual, Linguistic & Cognitive Skills
- 1.4 Sensitive Periods of Learning: Maria Montessori's Framework & Windows of Opportunity & Learning Timelines of Development in Young Children
- 1.5 Integrating Theories of Development & Learning for Early Childhood Education Curricula

Unit2: Early Education of Children with Disabilities

- 2.1 Young Children at Risk & Child Tracking
- 2.2 Interdisciplinary Assessments & Intervention Plans
- 2.3 Developmental Systems Model for Early Intervention (Ofgurnick, 2001)
- 2.4 Curricular Activities for Development of Skills of: Imagination, Joy, Creativity, Symbolic Play, Linguistic, Emergent Literacy, Musical, Aesthetic, Scientific & Cultural Skills
- 2.5 Evidenced Based Practices for Early Intervention

Unit 3: Inclusive Early Childhood Educational (ECE) Practices

- 3.1 Natural Environments, Service Delivery Models & Importance of Universal Designs of Learning (UDL)

- 3.2 Practices for Inclusive ECE Programs: Adaptations of Physical Environment & Equipments, Visual Support Materials, Parent Partnerships, Friendships & Engagements with Typical Children
- 3.3 Principles of Inclusive ECE Practices: Full Participation, Open Ended Activities, Collaborative Planning
- 3.4 Collaborating with Parents, Family Education & Developing Individualised Family Service Plan (IFSP)
- 3.5 School Readiness and Transitions

Practical/ Field Engagements

- I. Developing a journal on developmental milestones & learning timelines of children from 0 to 8 years
- Participation in workshop & develop five creative teaching learning materials for children in inclusive early childhood education programs

Transactions

Visits, Observations & Workshops.

Essential Readings

- Costello, P.M. (2000). *Thinking Skills & Early Childhood Education*. London: David Fulton Publishers.
- Dunn, S.G., & Dunn, K. (1992). *Teaching Elementary students through their individual learning styles: Practical approaches for grades 3-6*. Massachusetts: Allyn & Bacon.
- Guralnick, M.J. (2005). *The Developmental Systems Approach to Early Intervention*: Brookes Publication.
- Klausmeir, H.J., & Sipple, T.S. (1980). *Learning & Teaching Concepts. A strategy for testing applications of theory*. New York: Academic Press.
- Mohanty, J., & Mohanty, B. (1999). *Early Childhood Care and Education*. Delhi: Offset Printers.

Suggested Readings

- Barbour, N., & Seefeldt, C. (1998). *Early Childhood Education. An Introduction* (4th Eds). U.K: Prentice Hall.
- Broman, B. C. (1978). *The Early Years in Childhood Education*. Chicago: RandMcNally College Publishing Company.
- Catron, C.E., & Allen, J. (1993). *Early Childhood Curriculum*. New York: MacMillan Publishing Company.
- Dahlberg, G. , Moss, P. & Pence, A. (2007). *Beyond Quality in Early Childhood Care and Education*. (2nd Ed.). New York: Routledge Publication.

- Dopyera, M.L., & Dopyera, J. (1977). *Becoming a Teacher of Young Children*. New York: Random House Publications.
- Gordon, I.J. (1972). *Early Childhood Education*. Chicago: Chicago University Press.
- Hamilton, D.S. & Flemming, (1990). *Resources for Creative Teaching in Early Childhood Education* (2nd Edition). Tokyo: Harcourt Brace Jovanovich.
- Hilderbrand, V. (1991). *Introduction to Early Childhood Education*. New York: MacMillan Publishing.
- Krogh, S.L., & Slentz, K. (2001). *Early Childhood Education, Yesterday, Today & Tomorrow*. London: Lawrence Erlbaum Associates Publishers.
- Range, D.G., Layton, J.R. & Roubinek, D.C. (1980). *Aspects of Early Childhood Education. Theory to Research to Practice*. New York: Academic Press.
- Spodek, B., Saracho, O.N., & Davis, M.D. (1987). *Foundations of Early Childhood Education*. Englewood Cliffs, New Jersey: Prentice Hall,
- Wortham, S.C. (NK). *Measurement & Evaluation in Early Childhood Education* (2nd Eds.), Ohio: Merrill Prentice Hall.

APPLIED BEHAVIOUR ANALYSIS

Course Code: B 10(C)

Contact Hours: 30

Marks: 50

Objectives

After undertaking the course the student-teachers will be able to

Develop an understanding of the underlying principles and assumptions of Applied Behavioural Analysis (ABA).

Use various measures of behavioural assessment.

Apply methods of ABA in teaching and learning environments.

Integrate techniques of ABA in teaching programs.

Select suitable strategies for managing challenging behaviours.

Unit 1: Introduction to Applied Behaviour Analysis (ABA)

1.1 Principles of Behavioural Approach

1.2 ABA - Concept and Definition

1.3 Assumptions of ABA – Classical and Operant Conditioning

1.4 Behaviour- Definition and Feature

1.5 Assessment of Behaviour – Functional Analysis of Behaviour, Behaviour Recording Systems

Unit 2: Strategies for Positive Behaviour Support

2.1 Selection of Behavioural Goals

2.2 Reinforcement

Types: Positive and Negative, Primary and Secondary

Schedules: Continuous, Fixed Ratio, Fixed Interval, Variable Ratio, Variable Interval

2.3 Discrete Trial Teaching

Discriminative Stimulus - Characteristics

Response

Prompts: Physical, Gestural, Pointing, Visual, Positional, Verbal

Consequence - Characteristics

Inter-Trial Interval

2.4 Application of ABA in Group Setting

Negotiation and contract

Token economy

Response cost

Pairing and fading

2.5 Leadership role of teacher in promoting positive behaviour

Unit 3: Management of Challenging Behaviour

10 hours

- 3.1 Differential Reinforcements of Behaviour
- 3.2 Extinction and Time Out
- 3.3 Response Cost and Overcorrection
- 3.4 Maintenance
- 3.5 Generalization and Fading

Practicum

- I. Observation and functional analysis of behaviour of a given case.
- II. Development of ABA program for management of a challenging behaviour.

Transaction

The course consists of several concepts from behavioural theories. The concepts should be explained through real life examples and selected case studies. Students should be encouraged to conduct systematic observations of behaviour and suggest suitable plan of action for dealing with behavioural deficits in children.

Essential Readings

- Bailey, J., & Burch, M. (2011). *Ethics for Behaviour Analysts*. Routledge, New York.
- Cooper, J.O., Timothy, E.H., & Heward, W.L. (2007). *Applied Behaviour Analysis*. Pearson Publications.
- Fisher, W.W., Piazza, C.C., & Roane, H.S. (2013). *Handbook of Applied Behaviour Analysis*. Guilford Press, New York.
- Kearney, A. J. (2007). *Understanding Applied Behaviour Analysis: An Introduction to ABA for Parents, Teachers and Other Professionals*. Jessica Kingsley, Philadelphia.
- Lewis, P. (2006). *Achieving Best Behaviour for Children with Developmental Disabilities*. Jessica Kingsley Publishers London.

Suggested Readings

- Aune, B., Burt, B., & Gennaro, P. (2013). *Behaviour Solutions for the Inclusive Classroom*. Future Horizons Inc, Texas.
- Moyes, R.A. (2002). *Addressing the Challenging Behaviour of Children with HFA/AS in the Classroom*. Jessica Kingsley Publishers London.

COMMUNITY BASED REHABILITATION

Course Code: B 10(D)

Contact Hours: 30

Marks: 50

Objectives

After completing this course the student-teachers will be able to

Explain the concept, principles and scope of community based rehabilitation.

Learn the strategies for promoting public participation in CBR.

Apply suitable methods for preparing persons with disability for rehabilitation within the community.

Provide need-based training to persons with disabilities.

Develop an understanding of the role of government and global agencies in CBR.

Unit 1: Introduction to Community Based Rehabilitation (CBR)

- 1.1 Concept and Definition of CBR
- 1.2 Principles of CBR
- 1.3 Difference between CBR and Institutional Living
- 1.4 Socio-cultural and Economic Contexts of CBR
- 1.5 Scope and Inclusion of CBR in Government Policies and Programs

Unit 2: Preparing Community for CBR

- 2.1 Awareness Program-Types and Methods
- 2.2 Advocacy - Citizen and Self
- 2.3 Focus Group Discussion
- 2.4 Family Counselling and Family Support Groups
- 2.5 CBR and Corporate Social Responsibility

Unit 3: Preparing Persons with Disability for CBR

- 3.1 School Education: Person Centred Planning, and Peer Group Support
- 3.2 Transition: Individual Transition Plan, Development of Self Determination and Self Management Skills
- 3.3 Community Related Vocational Training
- 3.4 Skill Training for Living within Community
- 3.5 Community Based Employment and Higher Education

Practicum/ Field Engagement

- Visit an ongoing CBR program and write a report on its efficacy
- II. Organize a community awareness program
- Conduct a focus group discussion on a selected disability issue with school/college students

Transaction

Besides lecture method the topics in this course may be transacted through discussion on selected case studies, classroom seminar/debates.

Essential Readings

- Loveday, M. (2006). *The HELP Guide for Community Based Rehabilitation Workers: A Training Manual*. Global-HELP Publications, California.
- McConkey, R. and O'Tool, B (Eds). *Innovations in Developing Countries for People with Disabilities*, P.H. Brookes, Baltimore.
- Neufelt, A. and Albright, A (1998). *Disability and Self-Directed Employment: Business Development Model*. Campus Press Inc. York University.
- Peat, M. (1997). *Community Based Rehabilitation*, W.B. Saunders Company.
- Scheme of Assistance to Disabled for Purposes of Fitting of Aids/Appliances*, — Ministry of Social Welfare, Govt. of India, New Delhi.
- Scheme of Assistance to Organizations for Disabled Persons*, Ministry of Social Welfare, Govt. of India, New Delhi.
- WHO .(1982). *Community Based Rehabilitation — Report of a WHO International Consultation*, Colombo, Sri Lanka, 28 June- 3 July. WHO (RHB/IR/82.1)
- WHO .(1984). "Rehabilitation For All" in World Health Magazine, WHO, Geneva.

APPLICATION OF ICT IN CLASSROOM

Course Code: B 10(E)

Contact Hours: 30

Marks: 50

Course Description

This course has dual purpose: firstly it aims to orient the teacher trainee to various applications of Information and Communication Technology in teaching learning process; and secondly it intends to orient the learners to understand the scope and application of ICT for students with disabilities. The course includes uses of all kinds of media and computer in order to give hands on experience of applying ICT in various learning environments as well to familiarize the student teacher with different modes of computer based learning.

Objectives

After completing the course the student teacher will be able to

- Gauge the varying dimensions in respect of ICT and Applications in Special Education.*
- Delineate the special roles of ICT Applications.*
- Acquire Familiarity with Different Modes of Computer-Based Learning.*

Unit 1: Information Communication Technology (ICT) and Special Education

- 1.1 Meaning and Scope of ICT and Its Role in 'Construction of Knowledge'
- 1.2 Possible Uses of Audio-Visual Media and Computers (Radio, Television, Computers)
- 1.3 Integrating ICT in Special Education With Reference To Articles 4 and 9 of UNCRPD and Goal 3 of Incheon Strategy
- 1.4 Three as of ICT Application—Access, Availability, Affordability
- 1.5 Overview of WCAG (Web Content Access Guidelines)

Unit 2: Using Media and Computers

- 2.1 Media: Radio and Audio Media- Script Writing, Storytelling, Songs, etc., Television and Video in Education, Importance of Newspaper in Education
- 2.2 Computers: Functional Knowledge of Operating Computers—On/Off, Word Processing, Use Of Power Point, Excel, ICT Applications for Access to Print
- 2.3 Computer as a Learning Tool: Effective Browsing Of The Internet for Discerning and Selecting Relevant Information, Survey of Educational Sites and Downloading Relevant Material; Cross Collating Knowledge from Varied Sources
- 2.4 Computer-Aided Learning: Application of Multimedia in Teaching and Learning, Programmed Instruction; Computer-Assisted Instruction; Interactive Learning
- 2.5 E-Classroom: Concept, Organizing E-Classroom and Required Adaptations for Students with Disabilities

Unit 3: Visualising Technology-Supported Learning Situations

- 3.1 Preparation of Learning Schemes and Planning Interactive Use of Audio-Visual Programme
- 3.2 Developing PPT Slide Show for Classroom Use and Using of Available Software or CDs with LCD Projection for Subject Learning Interactions
- 3.3 Generating Subject-Related Demonstrations Using Computer Software and Enabling Students to Plan and Execute Projects
- 3.4 Interactive Use of ICT: Participation in Social Groups on Internet, Creation of 'Blogs', Organizing Teleconferencing and Video-Conferencing
- 3.5 Identifying and Applying Software for Managing Disability Specific Problems

Course Work/ Practical/ Field Engagement (any Two of the following)

- I. Develop a script on any topic of your choice. Conduct an interview with an expert on the selected topic to prepare an audio or video program of 15 minutes duration
- Prepare a PPT by inserting photos and videos on a topic of your choice III.
- Create your email account as well as design a blog

Essential Readings

- Abbot, C. (2001). *ICT: Changing Education*. Routledge Falmer.
- Florian, L., & Hegarty J. (2004). *ICT and Special Educational Needs: A Tool for Inclusion*. Open University Press.

Suggested Readings

- Kozma, R.B. (2003). *Technology, Innovation, and Educational Change: A Global Perspective: A Report of the Second Information Technology in Education Study, Module 2*. International Society for Technology in Education.

GENDER AND DISABILITY

Course Code: B 10(F)

Contact Hours: 30

Marks: 50

Objectives

After completion of this course the student-teachers will be able to

Develop an understanding of human rights based approach in context of disability.

Explain the impact of gender on disability.

Describe the personal and demographic perspectives of gender and disability.

Analyse the issues related to disabled women and girl children.

Unit 1: Human Right-based Approach and Disability

6 Hours

1.1 Human Rights-Based Approach: Concept and History

1.2 Principles of Human Rights-Based Approach

Equality and Non-Discrimination

Universality & Inalienability

Participation and Inclusion

Accountability and Rule of Law

1.3 Elements of Human Rights System

Legal Framework

Institutions

Development Policies & Programs

Public Awareness

Civil Society

1.4 Advantage of Human Rights-Based Approach

1.5 Implications for Disability

Empowerment

Enforceability

Indivisibility

Participation

Unit 2: Gender and Disability

10 Hours

2.1 Sex & Gender: Concept & Difference

2.2 Impairment & Disability: Concept & Difference

2.3 Gendered Experience of Disability

Public Domain: School and Outside School

Private and Familial Domain

Normalization and Social Role Valorisation

2.4 Gender and Disability Analysis: Techniques and Strategies

2.5 Psyche and Gender: Implications for Teaching

Unit 3: Women and Girl Child with Disability

10 Hours

- 3.1 Inclusive Equality
 - Access to Family Life
 - Access to Education, Vocational Training and Employment
 - Access to Political Participation
- 3.2 Factors Contributing to Disability
 - Gender-Based Violence in School and Within Family
 - Traditional Practices
- 3.3 Sexual and Reproductive Health
- 3.4 Teacher's Role in Promoting Gender Equality
- 3.5 Gender Critique of Legislation, Government Policy and Schemes

Practicum/Field Engagement

- Study the case of a woman with disability and submit a report
- II. Review selected paper/s authored by women with disability
- III. Conduct a gender analysis of a selected disability Act/Policy

Transaction

This course has been designed to provide the student teachers a socio-cultural perspective to disability. It aims to promote awareness about the space for disability equity and rehabilitation within the human rights system. As such the transaction of the course topics should be done through focus group discussions, and issue-based classroom interactions in addition to lectures and seminars.

Essential Readings

- Habib, L. A. (1997). *Gender and Disability: Women's Experiences in the Middle East*. Oxfam, UK.
- Hans, A. (2015). *Disability, Gender and the Trajectories of Power*. Sage Publications Pvt. Ltd.
- Meekosha, H. (2004). *Gender and Disability*. Sage Encyclopaedia of Disability.
- O'Brien, J., & Forde, C. (2008). *Tackling Gender Inequality, Raising Pupil Achievement*, Dunedin Academic.
- Ridgeway, C. L. (2011). *Framed by Gender: How Gender Inequality Persists in the Modern World*. Oxford University Press.
- Samuels, E. (2014). *Fantasies of Identification: Disability, Gender, Race*. NYU Press, USA.
- Smith, B. G., & Hutchison, B. (2013). *Gendering Disability*. Rutgers University Press, New Jersey.

Desirable Readings

- Beeghley, L. (1999). *Angles of Vision: How to Understand Social Problems*, West View Press.
- Purkayastha, D. (2010). *Economic Growth, Intra-Household Resource Allocation and Gender Inequality*, Atlantic Economic Journal, Vol. 38, No. 4.
- Treas, J., & Drobnic, S. (2010). *Dividing the Domestic: Men, Women, and Household Work in Cross-National Perspective*, Stanford University Press.

BRAILLE AND ASSISTIVE DEVICES

Course Code: B 10(G)

Credit: 02

Contact Hours: 30

Marks: 50

Introduction

Braille, the embossed system of reading and writing for the blind along with its inventor, Louis Braille (1809-1852), has opened a wide range of avenues and opportunities for effective mainstreaming and empowerment for Persons with Visual Impairment. In addition, a plethora of devices are now available which help the visually impaired to access meaningful education in all school-subjects as also skills of independent living and economic activities.

This course familiarizes the student-teachers with the importance and operational aspects of Braille, which has stood the test of time and competition for the last about 185 years. It also introduces them to basic devices used for teaching blind and low vision children.

It is hoped that through the study of the course, the learners will be motivated to know more about these and various other devices and technologies and be in a position to help children with visual impairment/their parents to procure the needed devices with ease and speed.

Objectives

After completing the course the student-teachers will be able to

Acquire basic information about Braille, its relevance and some important functional aspects.

Get basic information on types and significance of different Braille devices.

Get acquainted with the types and significance of basic devices relating to Mathematics, Science, Geography and Low Vision as also on sources of their availability.

Unit 1: Braille

- 1.1 Louis Braille and the Evolution of Braille
- 1.2 Continuing Relevance of Braille vis-a-vis Audio Material
- 1.3 Braille Signs, Contractions and Abbreviations--English Braille
- 1.4 Braille Signs and Symbols—Hindi/Regional Language
- 1.5 Braille Reading and Writing Processes

Unit 2: Braille Devices -- Types, Description, Relevance

- 2.1 Slate and Stylus
- 2.2 Braille Writer
- 2.3 Electronic Devices— Note takers and Refreshable Braille Displays
- 2.4 Braille Embossers
- 2.5 Braille Translation Software

Unit 3: Other Devices – Types, Description, Relevance

- 3.1 Mathematical Devices: Taylor Frame and Types, Abacus, Geometry Kit, Algebra Types
- 3.2 Geography: Maps--Relief, Embossed, Models
- 3.3 Science Material
- 3.4 Low Vision Aids--Optical, Non-Optical, Vision Training Material
- 3.5 Schemes and Sources of Availability

Course Work/ Practical/ Field Engagement (Any Two)

Each Student-Teacher will

- a. Observe at least five devices in use in at least five school periods.
- b. Draw up an item-wise price list of at least ten devices from different sources.
- c. Prepare a presentation – Oral/ Powerpoint – on the relevance of Braille for children with visual impairment.
- d. Prepare a report on the availability and use of Mathematical devices (at least two) in one special school and on inclusive school.
- e. Make a report on the application of at least two non-optical devices for children with low vision.

Essential Readings

A Restatement of the Layout, Definitions and the Rules of the Standard English Braille System (1971). London: The Royal National Institute for the Blind.

Ashcroft, S.C., & Henderson, F. (1963). Programmed Instruction in Braille. Pittsburgh: Stanwick House.

Lowenfeld, B. (1969). Blind Children Learn to Read. Springfield: Charles C. Thomas.

Mani, M.N.G. (1997). Amazing Abacus. Coimbatore: SRVK Vidyalaya.

Manual on Bharti Braille (1980). Dehradun: NIVH

Olson, M. R. (1981). Guidelines and Games for Teaching Efficient Braille Reading. New York: AFB.

Proceedings: National Conference on Past and Present Status of Braille in India(2001). New Delhi: All India Confederation of the Blind.

Suggested Readings

Hampshire, B. (1981). Working with Braille - A Study of Braille as a Medium of Communication. Geneva: UNESCO.

Kusanjima, T. (1974). Visual Reading and Braille Reading. New York: AFB.

Mani, M.N.G. (1992). Techniques of Teaching Blind Children. N.Delhi: Sterling Publishers.

Mellor, M. C. (2006). Louis Braille A Touch of Genius. Boston: National Braille Press.

ORIENTATION AND MOBILITY

Course Code: B 11(A)

Contact Hours: 30

Marks: 50

Introduction

Movement with independence in the environment has been stated to be one of the major challenges of vision loss. In order to facilitate their meaningful empowerment, therefore, it is necessary to provide students with visual impairment skills and techniques which enable them to cope with these challenges. Developments, especially during and after World War II, have led to the emergence of a large variety of such strategies, skills and technologies, which are covered under the discipline titled Orientation and Mobility.

So, the present course carrying the same title introduces the learners to various crucial aspects of this vital subject. It is hoped that through the study of the course, the student-teachers would be in a better position to understand the implications of vision loss with reference to independent movement. It would also enable them to get insights into basic skills and components essential for meaningful orientation and easy and graceful movement for the visually impaired.

Objectives

After completing the course the student-teachers will be able to

Describe the nature and scope of O&M as also the O&M related responsibilities of the special teacher.

Acquire basic knowledge of human guide techniques.

Describe pre-cane and cane travel skills and devices.

Get acquainted with the importance and skills of training in independent living for the visually impaired.

Unit 1: Introduction to Orientation and Mobility

- 1.1 Orientation and Mobility -- Definition, Importance and Scope
- 1.2 Basic Terminologies Associated with O&M: Trailing, Landmarks, Clues, Cues, Shoreline, Squaring Off, Clockwise Direction, Sound Masking, Sound Shadow
- 1.3 Roles of Other Senses in O&M Training
- 1.4 Special Responsibilities of Special Teacher/Educator with reference to O&M Training
- 1.5 Blindfold -- Rationale and Uses for the Teacher

Unit 2: Human/ Sighted Guide Technique

- 2.1 Grip
- 2.2 Stance
- 2.3 Hand Position

2.4 Speed Control

2.5 Negotiating: Narrow Spaces, Seating Arrangements, Staircases, Muddy paths

Unit 3: Pre-Cane Skills

3.1 Upper and Lower Body protection

3.2 Room Familiarization

3.3 Using Oral Description for Orientation

3.4 Search Patterns

3.5 Building Map Reading Skills

Unit 4: Cane Travel Techniques and Devices

4.1 Canes -- Types, Parts, Six Considerations

4.2 Cane Travel Techniques: Touch Technique, Touch and Drag Technique, Diagonal Cane Technique

4.3 Use of Public Transport

4.4 Asking for Help: When and How

4.5 Electronic Devices, Tactile and Auditory Maps -- Description and Uses

Unit 5: Training In Independent Living Skills

5.1 Self Care, Gait and Posture

5.2 Personal Grooming

5.3 Eating Skills and Etiquette

5.4 Identification of Coins and Currency Notes

5.5 Basics of Signature Writing

Course Work/Practical/ Field Engagement

Undertake any two of the following

- a. Act as a sighted guide in different situations/settings.
- b. Prepare a list of canes and other devices available with various sources along with prices.
- c. Undergo an experience of moving under a blindfold for a few minutes and describe it (about 200 words).
- d. Make a short PowerPoint/ oral presentation for about 5 minutes on the importance of O&M for the visually impaired.
- e. Draw up a list of important clues/cues/landmarks which the visually impaired student can use in the school.

Essential Readings

Blasch, B. B., Weiner, W. R., & Welsh, R. L. (1997). Foundations of Orientation and Mobility (2nd ed.). New York: AFB Press.

Cutter, Joseph (2006). Independent Movement and Travel in Blind Children. IAP, North Carolina

Fazzi, D.L. & Petersmeyer, B.A. (2001). *Imagining the Possibilities: Creative Approaches to Orientation and Mobility Instruction for Persons who are Visually Impaired.*: AFB Press, New York.

Jaekle, Robert C. (1993). *Mobility Skills for Blind People: A Guide for Use in Rural Areas.* Christoffel Blinden Mission.

Knott, N.I. (2002). *Teaching Orientation and Mobility in the Schools: An Instructor's Companion.* AFB Press, New York.

Smith, A.J. & Geruschat, D. R. (1996). *Orientation and Mobility for Children and Adults with Low Vision.* In A. L. Corn & A. J. Koenig (Eds.), *Foundations of Low Vision: Clinical and Functional Perspectives* .: AFB Press, New York.

Suggested Readings

Dodds, Allan (1986). *Mobility Training for Visually Handicapped People.* London: Croom Helm.

Hill, Everett and Ponder, Purvis (1976). *Orientation and Mobility Techniques.* AFB, New York.

Jacobson, W.H. (1993). *The Art and Science of Teaching Orientation and Mobility to Persons with Visual Impairments.* AFB Press, New York.

Singh, J.P. (2003). *Technology for the Blind.* Kanishka Publication. New Delhi

COMMUNICATION OPTIONS: ORALISM

Course Code: B 11(B)

Contact Hours: 30

Marks: 50

Introduction

Communication, language and speech have always been at the centre stage when education of children with deafness is being discussed. Without going into much of judgemental discussions in the direction of 'either – or' options to be the 'best', this syllabus intends to expose the student-teachers to all the dominant options. However, over and above the said exposure offered through compulsory courses, this optional course offers the student-teachers an additional opportunity to sharpen the skills in one of the categories of options. This is expected to emphasize use of appropriate options rather than advocating one among the many. Moreover, learning this optional course is also expected to provide wider career choices for the student teachers.

Objectives

After learning this course the student-teachers will be able to

Discuss the Aural Oral Options with reference to persons with hearing impairment in the context of India.

Discuss the relevant issues like literacy, inclusion and training with reference to Oralism /Oral Rehabilitation.

Exhibit beginner level hands on skills in using these options.

Motivate self to learn and practice more skills leading to linguistic adequacy and fluency to be used while developing spoken language in children with hearing losses.

Unit 1: Understanding Hearing Loss in Real Life Context

- 1.1 Basic Awareness on Paradigms of D/Deafness (Medical and Social)
- 1.2 Basic Awareness on Deafness and Communicative Access: Challenges and Concerns
- 1.3 Basic Awareness on Autonomy, Inclusion and Identity with reference to Oral Options
- 1.4 Oral/ Aural Verbal Options and Realistic Expectations of Family and Teachers
- 1.5 Importance of Neural Plasticity and Early Listening Opportunities

Unit 2: Advance Understanding of Oral Options

- 2.1 Difference Between Uni Sensory and Multi Sensory Approach in Oralism
- 2.2 Oracy To Literacy: Why and How
- 2.3 Speech Reading: Need, Role and Strategies in All Communication Options
- 2.4 Training and Guidance on Aural Oral Practices for Families and Tuning Home Environment: Current Scenario, Importance And Strategies
- 2.5 Tuning Mainstream Schools/Classrooms for Aural Oral Communication: Do's and Don'ts

Unit 3: Skill Development Required for Oralism

- 3.1 Practicing Interpreting Audiograms and Exposure to Goal Setting in Listening Skills
- 3.2 Practicing Motherese (Addressing/Talking to Young Children) and Age Appropriate Discourse with Children Using Appropriate Language, Turn Taking and Eye Contact
- 3.3 Practicing Fluency Skills in Verbal Communication: Spontaneous Conversations, Narrations and Loud Reading
- 3.4 Practicing Skills in Story Telling/ Narrations/ Jokes/ Poems/ Nursery Rhymes
- 3.5 Ongoing Monitoring and Assessing Auditory Functioning and Speech Development: Reading Model Formats Used for the Purpose (Checklists, Recordings, Developmental Scales)

Unit 4: Skill Development Auditory Verbal (AV) Approach

- 4.1 AV Approach: Meaning, Misconcepts and Justification
- 4.2 Stages of Auditory Hierarchy
- 4.3 Understanding Listening Strategies, Techniques of AV Approach and Their Relation to Listening Environment
- 4.4 Reading Model Plans and Observing a Few Weekly Individual Sessions
- 4.5 Developing Instructional Material for AVT Sessions Linking Listening, Language and Cognition

Unit 5: Implementing Oralism and AV Approach in Indian Special Schools & Summing up

- 5.1 Use Of Oralism and AV Approach in Indian Special Schools: Current Scenario
- 5.2 Oralism / AV Approach: Prerequisites for Special Schools
- 5.3 Strategies of Implementation Oral Communication Policy and Fulfilling Prerequisites
- 5.4 Resource Mobilization For Listening Devices: (ADIP, Organized Charity, CSR, Fund Raising Events, Web Based Fund Raising)
- 5.5 Reflections On The Course: From Theory to Practice to Initiating Change

Course Work/ Practical/ Field Engagement

- Watching Video's of Individual Sessions and Classroom Teaching
- II. Role Play and Dramatization
- Developing Learning Material for Facilitating Connectivity Among Listening, Language and Cognition
- IV. Recording Self Narrated Stories / Poems and Writing Reflections Upon it
- Interacting with Non Disabled Children for Practicing Expansion of Ideas

Essential Readings

- Borden, Gloria J.,; Harris, Katherine S. & Raphael, Lawrence J. (2005). *Speech Science Primer (4th)* Lippincott Williams and Wilkins: Philadelphia.

- Dhvani* (English). Balvidyalaya Publication: Chennai.
- Estabrooks, W. (2006). *Auditory-Verbal Therapy And Practice* , Ag Bell
- Heller, R. (1999). *Managing Change*. Dk Publishing: New York.
- Ling, D. (1990). *Acoustics, Audition Aand Speech Reception*. (Cd)Alexandria, Auditory Verbal International.
- Paul, P. V. (2009). *Language and Deafness*. Jones And Bartlett: Boston.
- Communication Options And Students With Deafness*. (2010). Rehabilitation Council of India , New Delhi.

Suggested Readings

- Chaney, A. L., & Burk, T. L. (1998). *Teaching Oral Communication In Grades K – 8*. Allyn And Bacon. Boston
- Cole, E., & Flexer, C. (2010). *Children with Hearing Loss: Developing Listening and Talking, Birth to Six*. (2nd Ed.).Plural Publishing Inc,San Diego, CA.
- Dhvani* (Marathi). Balvidyalaya – Cym Publication
- Directory of Rehabilitation Resources for Persons with Hearing Impairment in India. (2000). AYJNIHH Publication, Mumbai.
- Estabrooks, W., & Marlowe J, (2000). *The Baby is Listening*, A. G. Bell Association, Washington D.C.
- Estabrooks , W. (2001). *50 Frequently Asked Questions (Faqs) About Auditory-Verbal Therapy*. Learning to Listen Foundation.
- Heller, R. (1999). *Effective Leadership*. Dk Publishing: New York.
- Heller, R. (1999). *Managing Change*. Dk Publishing: New York.
- Ling, D. (1989). *Foundations of Spoken Language for Hearing Impaired Children*. A.G.Bell. Washington D.C.
- Ling, D., & Ling, A.H. (1985). *Aural Habilitation: The Foundations of Verbal Learning in Hearing Impaired Children*. A.G. Bell Association, Washington D.C.
- Edgar, L. L., & Marguerite, S. (1963). *Play it by ear! : auditory training games*, John Tracy Clinic Publication, Los Angeles.
- Resource Book on Hearing Impairment*. AYJNIHH Publication.
- Unpublished Dissertations and Thesis on Profiling Communication Options in Special Schools in India*.

COMMUNICATION OPTIONS: MANUAL (INDIAN SIGN LANGUAGE)

Course Code: B 11(C)

Contact Hours: 30

Marks: 50

Introduction

Communication, language and speech have always been at the centre stage when education of children with deafness is being discussed. Without going into much of judgemental discussions in the direction of ‘either – or’ options to be the ‘best’, this syllabus intends to expose the student-teachers to all the dominant options. However, over and above the said exposure offered through compulsory courses, this optional course offers the student-teachers an additional opportunity to sharpen the skills in one of the categories of options. This is expected to emphasize use of appropriate options rather than advocating one among the many. Moreover, learning this optional course is also expected to provide wider Career Choices for the Student Teachers.

Objectives

After learning this course the student-teachers will be able to

Discuss the two manual options with reference to Indian special schools.

Discuss the relevant issues like literacy, inclusion and training with reference to manual options.

Describe manual options in the light of issues like language, culture and identity.

Exhibit beginner level hands on skills in using manual options.

Motivate self to learn and practice more skills leading to linguistic adequacy and fluency.

Unit 1: Understanding Deafness in Real Life Context

- 1.1 Basic Awareness of Paradigms of D/Deafness (Medical and Social)
- 1.2 Basic Awareness of Deafness and Communicative Challenges / Concerns
- 1.3 Basic Awareness on Deafness with Reference to Culture, Language, Identity, Minority Status, Deaf Gain, Literacy and Inclusion
- 1.4 Basic Awareness of Difference between ISL and ISS; Myths and Facts
- 1.5 Importance of Neural Plasticity and Early Language Opportunities

Unit 2: Advance Understanding of Manual Options and Indian Scenario

- 2.1 Use of Simcom and Educational Bilingualism in Indian Schools: Current Scenario
- 2.2 Challenges, Prerequisites and Fulfilling Prerequisites
- 2.3 Monitoring and Measuring Development of ISL/ISS in Students: Receptive and Expressive Mode
- 2.4 Training and Guidance for Families and Tuning Home Environment: Current Scenario and Strategies

- 2.5 Tuning Mainstream Schools/Classrooms for Students Using Manual Communication:
Do's and Don'ts

Unit 3: ISL Skill Development: Middle Order Receptive and Expressive Skills

- 3.1 Practicing 'Motherese' (Tuning Language to Suit Young Children) and Age Appropriate Discourse with Children with Appropriate Language, Turn Taking and Eye Contact
- 3.2 Practicing Natural Signing in Short Common Conversations
- 3.3 Practicing Natural Signing in Stories/Poems/Narrations/Jokes
- 3.4 Practicing Natural Signing in Discussing Emotions, Expansion of Ideas and Current Affairs
- 3.5 Practicing Group Dynamics

Unit 4: ISL Skill Development: Towards Higher Order Receptive and Expressive Skills

- 4.1 Learning to Express Gender, Number, Person, Tense, Aspect
- 4.2 Practicing Sentence Types: Affirmative, Interjections, Imperative and Interrogative and Negativization
- 4.3 Practicing Sentence Types: Simple, Complex, Compound
- 4.4 Observing Using ISL in Classrooms – Social Science
- 4.5 Observing Using ISL in Classrooms – Science / Mathematics

Unit 5: ISS/ ISL Skill Development and Course Conclusions

- 5.1 Practicing Markers (Local Language)
- 5.2 Practicing Syntax in Conversations and Discussions
- 5.3 Observing Using ISS/ISL in Classrooms for School Subjects
- 5.4 Resource Mobilization for Skill Development Training (Organized Charity Sources, CSR, Fund Raising Events, Web Based Fund Raising)
- 5.5 Reflections on the Course: From Theory to Practice to Initiating

Change Course Work/ Practical/ Field Engagement

- Watching Videos of Individual Sessions and Classroom Teaching of Signing
- II. Role Play and Dramatization in ISL
- III. Developing Learning Material for Facilitating Connectivity among Signing, Language and Cognition
- IV. Recording Self Narrated Stories/ Poems and Writing Reflections
- V. Interacting with Deaf for Practicing Expansion of Ideas

Essential Readings

- Communication Options and Students with Deafness*. (2010). Rehabilitation Council of India, New Delhi.
- Heller, R. (1999). *Managing Change*. DK Publishing: New York.
- ISS Learning Material and Dictionaries
- Paul, P. V. (2009). *Language and Deafness*. Jones And Bartlett: Boston.
- Teaching Learning ISL Material Developed* at AYJNIHH, Mumbai, SRKV, Coimbatore and NISH, Trivandrum

Zeshan, U. (2000). *Sign Language in Indo-Pakistan*. John Benjamins Pub. Co, Philadelphia.

Suggested Readings

- Akamatsu, C. T., & Armour, V. A. (1987). Developing written literacy in deaf children through analyzing sign language, *American Annals of the Deaf*, 132(1), 46-51.
- Andrews, J.F., Winograd, P., & DeVille, G. (1994). Deaf children reading fables: Using ASL summaries to improve reading comprehension. *American Annals of the Deaf*, 139(3), 378-386.
- Devych, G. N., Bhattacharya, T., Grover, N., & Randhawa, S.P.K. (2014). *Indian Sign Language(S)*. Orient BlackSwan, Hyderabad.
- Directory of Rehabilitation Resources for Persons with Hearing Impairment in India*. (2000), AYJNIHH Publication.
- Education. Gallaudet Research Institute, Working Paper 89-3, Gallaudet University, Washington, D.C.
- Evans, L. (1982). *Total Communication, Structure and Strategy*. Washington D.C.: Gallaudet College Press.
- Ezell, H.K., & Justice, L.M.(2005). Programmatic Research On Early Literacy: Several Key Findings. *IES 3rd Annual Research Conference: American Speech Language & Hearing Association (ASHA)*.
- Frank, S. (1985). *Reading Without Nonsense*.: Teachers College Press, New York.
- Ghate, P. (1996). *Indian Sign System*. AYJNIHH In-House Publication: Mumbai.
- Ghate, R.A. (2009). *Survey of Teachers' Opinion on Status of Education of the Deaf*. Unpublished Report of RCI, New Delhi.
- Heller, Robert (1999). *Effective Leadership*. Dk Publishing: New York.
- Huddar, A. (2008). *Language and Communication*. DSE Manuals. Rehabilitation Council of India, New Delhi.
- Improve Reading Comprehension. *American Annals of the Deaf*, 139, 378-386.
- Indian Sign Language Dictionary .(2001). Sri Ramakrishna Mission Vidyalaya, Coimbatore.
- Johnson, R., Liddell, S., & Erting, C. (1989). Unlocking the Curriculum: Principles for Achieving Access in Deaf Language. *American Annals of the Deaf*, 132, 46-51.
- Lewis, Rena B. & Doorlag, Donald H. (1999). (5th Ed) *Teaching Students with Special Needs in General Education Classrooms*. Prentice Hall Inc. New Jersey.
- Woodward, J., Vasishta, M., & de Santis, S. (1985). An introduction to the Bangalore variety of Indian Sign Language. Gallaudet Research Institute Monograph No. 4, Gallaudet Research Institute. Washington, D.C

Vasishta, M.M., Woodward, J., & De Santis, S. (1981). An Introduction to Indian Sign Language: Focus on Delhi. All India Federation of the Deaf, New Delhi.

Websites for Signed Dictionaries.

Woodward, J. (1993). "The Relationship of Sign Language Varieties in India, Pakistan and Nepal". *Sign Language Studies* (78), 15–22.

AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

Course Code: B 11(D)

Contact Hours: 30

Marks: 50

Objectives

The student-teachers will be equipped with a basic knowledge of AAC, AAC systems, AAC assessment, programme planning and strategies:

Unit 1: Organizational frame work for Communication:

- 1.1 Normal development of speech, language and communication
- 1.2 Factors that influence communication, speech and language in relation to each other
- 1.3 Levels of communication in children
 - 1.3.1 Functional (Emergent)
 - 1.3.2 Situational (Context Dependent)
 - 1.3.3 iii. Independent (Creative)

Unit 2: Basic principles of AAC interventions:

- 2.1 Child - Child capacity
- 2.2 Child capacity and context
- 2.3 Working towards symbolic expression
- 2.4 Communication skills and
- 2.5 Functions

Unit 3: Areas of AAC Assessment:

- 3.1 Sensory areas
- 3.2 Cognition , communication and language
- 3.3 Posture and positioning. Motor planning and control
- 3.4 Scanning
- 3.5 Environment, Interaction & Symbols

Unit 4: Context of Communication:

- 4.1 Partner /skills , user skills and environment
- 4.2 Competency development - types of competencies and its development
 - 4.2.1 Linguistic competence
 - 4.2.2 Operational Competence
 - 4.2.3 Social competence
 - 4.2.4 Strategic competence

Unit 5: Introduction to communication tools and Access Mode:

- 5.1 Types of AAC devices and systems

- 5.1.1 No Technology
- 5.1.2 Low Technology
- 5.1.3 High Technology
- 5.2 Access to communication charts - hand, finger, eye point
- 5.3 Access to devices:
 - 5.3.1 Switches - hand switch , blow switch, infrared devices etc
 - 5.3.2 Software -scan mode combined with a switch
- 5.4 Selection of AAC
 - 5.4.1 Child competency and environment
 - 5.4.2 Design, Access, Motor, Devices
- 5.5 Challenges in the development of AAC and Literacy
 - 5.5.1 Grammar ; spelling
 - 5.5.2 Building **Vocabulary**: and richness of language
 - 5.5.3 Motor expression

Suggested Reading:

- Silverman, F.H.(1994).*Communication for the Speechless (3rd Edn.)*. Allyn & Bacon, Boston.
- David R. Beukelman,D.R., & Mirenda,P (2013). *Augmentative and Alternative Communication Supporting Children and Adults with Complex Communication Needs (4th Edn.)* Brookes Publishing Co. Baltimore.
- Lynch, C., & Cooper, J.(1991).*Early Communication Skills: Practical Activities for Teachers and Therapists*, Speechmark Publishing Ltd, Bicester, Oxon
- Warrick, A., & Kaul,S.(1997).*Their manner of speaking : augmentative communication for children and young adults with severe speech disorders*, Indian Institute of Cerebral Palsy, Kolkata
- Communication, compiler: T.N. Southgate. BA, Ormerod School, Oxford, Editor ,G.M. Cochrane MA, FRCP, Equipment for Disabled People , Mary Mariborough Lodge, Nuffield Orthopaedic Centre, Oxford OX3 7 LD
- Tina, D., & Mike, D.(1997).*Literacy Through Symbols: Improving Access for Children and Adults*, David Fulton Publishers, London.
- McCurtin, A., & Geraldine, M.(2000). *The Manual of AAC Assessment*. Speechmark Publishing Ltd., London.

MANAGEMENT OF LEARNING DISABILITY

Course Code: B 11(E)

Contact Hours: 30

Marks: 50

Introduction

This course will provide an understanding of the types and characteristics of Children with Learning Disabilities and their associated condition. The course will include assessment of basic curricular skills, standardized tests and interpretation of test report. This course, grounded in research based interventions, is designed to assess all who work with students in special and regular education in developing skills to teach and support acceptable behavior that is demonstrated in home, school and community settings.

Objectives

After completing the course the student-teachers will be able to

Explain the concept, causes and characteristics of learning disabilities.

Discuss different types of learning disabilities and its associated conditions.

Develop teacher made assessment test in curricular areas.

Plan appropriate teaching strategies as per the specific needs of children with learning disability.

Unit 1: Learning Disabilities: Types

- 1.1 Verbal learning disabilities: Dyslexia, Dysgraphia, Dyscalculia.
- 1.2 Non-verbal learning disabilities
- 1.3 Language Disorders
- 1.4 Associated Conditions: ADHD & ADD
- 1.5 Emotional & Behavioral problems.

Unit 2: Assessment of Basic Curricular Skills

- 2.1 Assessment of Readiness Skills
- 2.2 Assessment of Reading, Writing and Math skills
- 2.3 Teacher made test
- 2.4 Standardized Tests: Need, Types & Purpose
- 2.5 Interpretation of Test report

Unit 3: Intervention Strategies in Basic Skills of Learning

- 3.1 Language skills
- 3.2 Reading
- 3.3 Writing
- 3.4 Maths skills
- 3.5. Study skills

Transaction

This activity-based approach should allow the teacher to step back and allow the student-teachers to self-facilitate. The student-teachers must be given experience in the various settings such as clinics, schools, resource centres etc, for exposure to actual assessment. Discussions, debates, simulations, collaborative methods, must be used for transaction.

Course Work/ Practical/ Field Engagement

Prepare of checklist for screening LD

Develop teacher made assessment test in any one curricular area for a given child

Plan appropriate teaching strategies as per the specific needs of a given child with learning disability

Essential Readings

Bauer, A. M., & Shea, T. M. (2003). Parents and schools: creating a successful partnership for students with special needs. Merrill Prentice Hall, New Jersey

Myklebust, H.(1983). Progress in Learning Disabilities, Guene and Stratton – New York.

Reid, K. (1988). Teaching the Learning Disabled, Allyn and Bacon, Boston.

Suggested Readings

Baca, L. M., & Cervantes, H.T. (2004).The Bilingual special education interface. (4th ed) . Pearson. New Jersey

Browder, D. M. (2001). Curriculum and assessment for students with moderate and severe disabilities. . The Guilford Press. New York

Brunswick, N. (2012). Supporting dyslexic adults in higher education and the workplace. . Wiley-Blackwell. Malden.

Fitzgibbon, G., & O'Connor, B. (2002). Adult Dyslexia:a guide for the workplace. John Wiley & Sons,Ltd. London.

Gribben, M.(2012). The study skills toolkit for students with dyslexia. Sage Pub. London

Karant, P., & Rozario, J. (2003). Learning disabilities in India : willing the mind to learn. Sage Publication, New Delhi

Martin, L, C.(2009). Strategies for teaching students with learning disabilities. . Corwin Press,California

McCardle, P., Miller, B., Lee, J, R., & Tzeng, O, J.L. (2011). Dyslexia across languages. (orthography and the brain-gene-behavior link) Baltimore. Paul H. Brookes.

Shula, C. (2000). Understanding children with language problems. Cambridge,New York.

- Prakash, P. (2008). Education of exceptional children: challenges and strategies. . Kanishka publishers, New Delhi.
- Reddy, G.L., & Ramar, R.(2000). Education of children with special needs, New Delhi – Discovery Pub.
- Thapa, K. (2008). Perspectives on learning disabilities in India. (current practices and prospects). Sage Publication, Los Angeles.
- Trusdell M. L., & Horowitz, I. W. (2002). Understanding learning disabilities : a parent guide and workbook : for parents, teachers, professionals, advocates and others who work with, or come in contact with, individuals with learning disabilities. (3rd rev ed) Maryland. York Press.
- Wong, B., & Butler, D. L. (2012). Learning about learning disabilities. (4th ed.) Amsterdam. Elsevier Academic Press.

VOCATIONAL TRAINING, TRANSITION & JOB PLACEMENT

Course Code: B 11(F)

Contact Hours: 30

Marks: 50

Objectives

After completing the course the student-teachers will be able to

Develop an understanding of vocational education & its relevance for PWD's.

Carry out vocational assessment and make vocational training plan.

Plan for transition from School to job.

Identify various avenues for job placement.

Facilitate PWD's in making choice of vocational trades.

Acquire the concept of independent living and empowerment.

Unit 1: Fundamentals & Assessment of Vocational Rehabilitation

- 1.1. Definition, meaning and scope of Vocational Education
- 1.2. Legislations, policies, agencies, schemes, concessions & benefits for PWDs with respect to employment
- 1.3. Approaches and models of Vocational training
- 1.4. Assessment, Evaluation of Generic skills & Specific job skills using various tools
- 1.5. Approaches & Principles of vocational assessment

Unit 2: Vocational Transition & Curriculum Planning

- 2.1. Concept, meaning, importance of transition
- 2.2. Vocational transition models
- 2.3. Transitional Planning at pre-vocational & post-vocational level
- 2.4. Development of Individualized Vocational Transitional Plan
- 2.5. Development of Vocational Curriculum

Unit 3: Process of Vocational Rehabilitation & Placement

- 3.1. Types of Employment Settings
- 3.2. Process of Job Placement & Creation of Need-based Employment Settings
- 3.3. Adaptations, Accommodation, Safety Skills and First Aid
- 3.4. Self Advocacy & Self Determination Skill Training
- 3.5. Equal opportunities and attitudes towards persons with disabilities

Hands on Experience

Developing curriculum on any vocational skill

Administering any vocational assessment tool

Visit to any vocation Institution

Suggested Readings

- McDonnell, J., & Hardman, M.L.(2010). Successful Transition Programs Pathways for Students With Intellectual and Developmental Disabilities, Sage Publications, Los Angeles.
- Kutty, A.T., & Rao L.G, (2003).Curriculum for Vocational Education, Transition of Persons with Mental Retardation from School to Work. Series -2, NIMH Publications, Secunderabad.
- Kutty, A.T., & Rao, L.G, (2001). Transition of Persons with Mental Retardation from School to Work – A Guide, NIMH Publications, Secunderabad.
- Mukhobadhyay, M., & Kutty A.T. (2006). Principles of Vocational Training, Part-II, DVTE (MR) Manual, Rehabilitation Council of India, Kanishka Publisher, New Delhi.
- Rao, V.K. (2004), Vocational Education, A.P.H. Publishing Corporation, New Delhi.
- Wehmeyer, M. L. (2007). Promoting Self-Determination in Sstudents with Developmental Disabilities, Guilford Press, Washington.
- Whitehead, T. D., & Hughey, J. B. (2004). Exploring Self Advocacy From a Social Power Perspective, Nova Science Publishers, New York

INTERVENTION AND TEACHING STRATEGIES

Course Code: C 14

Contact Hours: 60

Marks: 100

Introduction

This course builds on the pedagogy courses presented under A4 and A5 of the present B.Ed. curriculum. It prepares the student-teachers to transact lessons in various school-subjects for children with visual impairment. For this purpose, the required intervention and teaching techniques and skills are highlighted.

The student-teachers, it is hoped, will find the course highly stimulating, as it will enable them to help blind and low vision students to cope effectively with the challenges of curriculum transaction, at par with their sighted peers.

Objectives

After completing the course student-teachers will be able to

Explain various theoretical perspectives related to intervention & teaching strategies.

Demonstrate techniques of teaching Mathematics to visually impaired children.

Acquire necessary competencies and skills for teaching science and assessment of the learners with special reference to children with visual impairment.

Acquire and apply necessary skills for adapting TLM in social science and assessment of the learners with special reference to children with visual impairment.

Describe the process of assessment visual efficiency and classroom management for children with low vision.

Unit 1: Theoretical Perspectives

- 1.1 Difference among Methods, Approaches and Strategies
- 1.2 Intervention – Concept, Scope and Importance
- 1.3 Intervention for lately blinded students – Role of Special teachers/educators
- 1.4 Mediated teaching-learning – Concept, Need and Procedure
- 1.5 Enriched teaching for Concept development: Converting visual concepts into accessible experiences

Unit 2: Mathematics

- 2.1 Coping with Mathematics phobias
- 2.2 Conceptualization of Mathematical ideas – Processes and Challenges for Children with Visual Impairment
- 2.3 Preparation and Use of tactile materials
- 2.4 Mental arithmetic abilities – Concept, Importance and Application
- 2.5 Evaluation procedures with special reference to the Needs of Children with Visual Impairment

Unit 3: Science

- 3.1 Providing first-hand experience in the class and the school environment
- 3.2 Inclusive/collaborative learning for laboratory work
- 3.3 Science Teaching Learning Materials and Equipment: i) Preparation and use of TLM, ii) Locating and procuring Science equipment
- 3.4 Problem solving and Learning by doing approach for Visually Impaired students
- 3.5 Evaluation procedure with particular reference to Practicals and Adaptations in Examination questions

Unit 4: Social Science

- 4.1 Techniques of preparation and presentation of adapted Tactile maps, Diagrams, and Globe
- 4.2 Procuring, adapting and use of different types of models
- 4.3 Organizing field trips
- 4.4 Teaching Skills: Dramatization, Narration, Explanation, Story-telling, and Role play
- 4.5 Evaluation of concepts and skills in social science with particular reference to Geography

Unit 5: Teaching of Children with Low Vision

- 5.1 Visual Stimulation: Concept and Procedure
- 5.2 Selection of an appropriate medium of reading and writing
- 5.3 Techniques and procedures for developing reading and writing skills
- 5.4 Orientation and Mobility for low vision children
- 5.5 Classroom management – Seating arrangement, adjustable furniture, illumination, non-reflecting surfaces and colour contrast

Course Work / Practical / Field Engagement

Prepare and use two teaching learning materials for teaching Maths/ Science/ Social Science.

Prepare a short concept paper (about 500 words) on developing a science laboratory for the visually impaired students.

Functionally assess the vision of a low vision child and plan a teaching programme.

Essential readings:

Bourgeault, S. E. (1969). The Method of Teaching the Blind : The Language Arts. American Foundation for the Overseas Blind ,Kuala Lumpur.

Chapman, E. K. (1978). Visually Handicapped Children and Young People. Routledge, London.

Fernandez, G., Koenig. C., Mani. M.N.G., & Tensi. S. (1999). See with the Blind. Books for Change, Bangalore.

Jackson, J. (2007). Low Vision Manual. Edingurgh: Butterworth Heinemann/ Elsevier, Edingurgh.

- Jose, R. (1983). *Understanding Low Vision*. American Foundation For The Blind. New York.
- Kauffman, J.M., & Hallahan, D.P. (1981). *Handbook of Special Education*. Prentice Hall, New Delhi.
- Lowenfeld, B. (1973). *The Visually Handicapped Child in School*. John Day Company, New York.
- Lydon, W. T., & McGraw, M. L. (1973). *Concept Development for Visually Handicapped Children*. AFB, New York.
- Mangal. S. K. (2007). *Educating exceptional children-an introduction to special education*. PHI learning Pvt. New Delhi.
- Mangal, S. K. (2011) *Educating Exceptional Children: An Introduction to Special Education*. PHI Learning Pvt. Ltd., New Delhi.
- Mani. M. N. G. (1997). *Amazing Abacus*. S.R.K. Vidyalaya Colony, Coimbatore.
- Mani, M. N. G. (1992). *Techniques of Teaching Blind Children*. Sterling Publishers Pvt. Ltd. New Delhi.
- Macnaughton, J. (2005). *Low Vision Assessment*. Butterworth Heinemann/ Elsevier, Edingurgh.
- Mason, H., & McCall, S. (2003). *Visual Impairment – Access to Education for Children and Young people*. London: David Fulton Publishers.
- Mukhopadhyay, S., Mani, M.N.G., Roy Choudary, M., & Jangira, N.K. (1988). *Source Book for Training Teachers of Visually Impaired*. New Delhi: NCERT.
- Macnaughton, J. (2005). *Low Vision Assessment*. Butterworth Heinemann /Elsevier, Edingurgh.
- Niemann, S., & Jacob, N. (2009). *Helping Children who are Blind*. The Hesperian Foundation, California.
- Punani, B., & Rawal, N.(2000). *Handbook for Visually Impaired*. Blind Peoples' Association, Ahmedabad.
- Scholl, G.T. (1986). *Foundations of the education for blind and visually handicapped children and youth: Theory and Practice*. AFB Press, New York.
- Vijayan, P., & Gnaumi, V. (2010). *Education of children with low vision*. Kanishka Publication, New Delhi.

Suggested Readings:

- Agrawal, S. (2004). *Teaching Mathematics to Blind Students through Programmed Learning Strategies*. Abhijeet Publication, Delhi.
- Hodapp, R. M. (1998). *Developmental Disabilities: Intellectual, Sensory and Motor Impairment*. Cambridge University Press, New York.
- Kelley, P., & Gale, G. (1998). *Towards Excellence: Effective Education for Students with Vision Impairments*. North Rocks Press, Sydney.

- Mangold, S. S. (1981). A teachers' Guide to the Special Education needs of Blind and Visually handicapped Children. New York: AFB
- Pandey, V. P. (2004). Teaching of mathematics. Sumit Publication, New Delhi.
- Status of Disability in India. (2012). Rehabilitation Council of India, New Delhi.

TECHNOLOGY AND EDUCATION OF THE VISUALLY IMPAIRED

Course Code: C 15

Contact Hours: 60

Marks: 100

Introduction

Technology in the form of adaptive and assistive devices, plays a crucial role in the education of the visually impaired. This course brings into sharp focus the need and importance of such technologies both for the practicing teachers and the visually impaired learners. While highlighting the significance of addressing the users point of view/feedback and involving mainstream professionals in developing required technologies, the course also dwells upon on how best students with visual impairment get access to the printed text/material.

The course also acquaints the student-teachers with various devices for making the teaching-learning process for important school subjects meaningful, exciting and rewarding for all concerned. The educational needs of children with low vision and related technological perspectives are addressed, too, along with critical contributions of computer-aided learning and interventions.

In short, the course focuses on making transaction of curriculum for blind and low vision students, a really enjoyable and worthwhile experience. It needs to be studied in conjunction with course Code C14 of the curriculum.

Objectives

After completing the course student-teachers will be able to

Relate the concept and nature of educational technology and ICT to the education of children with visual impairment.

Acquire knowledge of the concept and nature of adaptive technology and explain underlying principles and techniques.

Get familiar with technologies for print-access for children with visual impairment.

Describe and use different technologies for teaching low vision children as also various school subjects.

Demonstrate understanding of computer-based teaching-learning processes.

Unit 1: Introducing Educational and Information Communication Technology

- 1.1 Educational Technology-Concept, Importance, and Scope
- 1.2 Difference between Educational Technology and Technology in Education
- 1.3 Special Significance and Goals of Technology for the Education of children with Visual Impairment
- 1.4 Information and Communication Technology (ICT) - Concept and Special Significance for teaching-learning of the visually impaired
- 1.5 ICT and the UN Convention on the Rights of Persons with Disabilities.

Unit 2: Adaptive Technologies

- 2.1 Concept and Purposes
- 2.2 Basic Considerations--Access, Affordability, and Availability
- 2.3 Addressing User's Perspectives in Developing Adaptive Technologies
- 2.4 Roles of IIT's and the Scientific Community;
- 2.5 Universal/Inclusive Design - Concept, Advantages, and Limitations.

Unit 3: Access to Print for the Visually Impaired

- 3.1 Screen Readers with Special Reference to Indian Languages; Magnifying Software, and Open Source Software.
- 3.2 Braille Notetakers and Stand-alone Reading Machines
- 3.3 Braille Translation Software with Particular reference to Indian Languages and Braille Embossers
- 3.4 On-Line Libraries and Bookshare
- 3.5 Daisy Books, Recordings, and Smart Phones.

Unit 4: Assistive Technologies for the Visually Impaired with Reference to School Subjects and Low Vision

- 4.1 Mathematics: Taylor Frame, Abacus, Geo Board, Algebra and Maths Types, Measuring Tapes, Scales, and Soft-wares for teaching Maths.
- 4.2 Science: Thermometers, Colour Probes, Scientific and Maths Talking Calculators, Light Probes, and Weighing scales and Soft-wares for teaching Science.
- 4.3 Social Science: Tactile/Embossed Maps, Charts, Diagrams, Models of Different Types, Auditory Maps, Talking compass, and GPS
- 4.4 Low vision devices: Optical, Non-Optical and Projective
- 4.5 Thermoform and Swell Paper technology and Softwares for developing tactile diagrams

Unit 5: Computer-Aided Learning

- 5.1 Social Media
- 5.2 Creation of Blogs
- 5.3 Tele-Conferencing
- 5.4 Distance Learning and ICT
- 5.5 e-Classroom: Concept and Adaptations for Children with Visual Impairment

Course Work / Practical / Field Engagement

Any three of the following

Prepare a list of devices for Mathematics and Science available for the visually impaired in one special school and one inclusive school

Write a short list of hints and suggestions you will offer to the scientific community for motivating them to develop adaptive technologies for the visually impaired

Make a short report (in about 500 words) on the advantages and limitations as well as sources of availability in respect of any print-access technology indicated in Unit

3 above.

Make a case study of a student with low vision at the secondary stage, indicating clearly his educational needs and how you can address them

Prepare a report on the possibilities and prospects available for the visually impaired students through the use of computers

Prepare a short note (in about 400 words) on various aspects of a classroom and how it could be made accessible to the visually impaired

Essential Readings

- Biwas, P. C. (2004). Education of children with Visual Impairment: in inclusive education. Abhijeet Publication, New Delhi.
- Bourgeault, S. E. (1969). The Method of Teaching the Blind: The Language Arts, Kuala Lumpur: American Foundation for the Overseas Blind.
- Chaudhary, M. (2006). Low Vision Aids. Japee Brothers, New Delhi.
- Lowenfeld, B. (1973). The Visually Handicapped Child in School. John Day Company, New York.
- Mani, M.N.G. (1997). Amazing Abacus. Coimbatore: S.R.K. Vidyalaya Colony.
- Mukhopadhyay, S., Mani, M.N.G., Roy Choudary, M., & Jangira, N.K. (1988). Source Book for Training Teachers of Visually Impaired. New Delhi: NCERT.
- Proceedings: Asian Conference on Adaptive technologies for the Visually Impaired (2009). New Delhi: Asian Blind Union
- Punani, B., & Rawal, N. (2000). Handbook for Visually Impaired. Blind Peoples' Association, Ahmedabad.
- Scheiman, M., Scheiman, M., & Whittaker, S. (2006). Low Vision Rehabilitation: a practical guide for occupational therapists. Thorefore Slack Incorp, New Jersy.
- Scholl, G. T. (1986). Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press, New York.
- Singh, J. P. (2003). Technology for the Blind: Concept and Context. Kanishka Publication, New Delhi.
- Vijayan, P., & Gnaumi, V. (2010). Education of Children with low Vision. Kanishka Publication, New Delhi.

Suggested Readings

- Fatima, R. (2010). Teaching aids in mathematics; a handbook for elementary teachers. Kanishka Publication, New Delhi.
- Hersh, M.A., & Johnson, M. (2008). Assistive Technology for Visually Impaired and Blind People. Springer, London.
- Sadao, K. C., & Robinson, N. B. (2010). Assistive Technology for young children: creating inclusive learning environments. Paul H Brooks, Baltimore.

PSYCHO SOCIAL AND FAMILY ISSUES

Course Code: C 16

Contact Hours: 30

Marks: 50

Introduction

Children with Visual Impairment belong to families. It is important to explore family backgrounds and their influence on how visually impaired are perceived and how children perceive themselves, and how they behave in consequence. The learners need to develop an insight into the plethora of emotions the family goes through at the birth of a special child, the challenges they face throughout the life of the visually impaired, and the roles and responsibilities of the family and the community.

Objectives

After completing the course student-teachers will be able to

Describe the effect of birth of a child with visual impairment on the family.

Analyze the role of family and parental concerns related to their child with visual impairment from birth to adulthood.

Explain the role of parent community partnership in the rehabilitation of a person with visual impairment.

Develop different skills to empower families in meeting the challenges of having a child with visual impairment.

Unit 1: Family of a Child with Visual Impairment

- 1.1 Birth of a child with visual impairment and its effect on parents and family dynamics
- 1.2 Parenting styles: Overprotective, Authoritative, Authoritarian and Neglecting
- 1.3 Stereotypic attitudes related to visual impairment and attitude modification
- 1.4 Role of family in Early stimulation, Concept development and Early intervention
- 1.5 Role of siblings and extended family

Unit 2: Parental Issues and Concerns

- 2.1 Choosing an educational setting
- 2.2 Gender and disability
- 2.3 Transition to adulthood: sexuality, marriage, and employment
- 2.4 Parent support groups
- 2.5 Attitude of professionals in involving parents in IEP and IFSP

Unit 3: Rehabilitation of Children with Visual Impairment

5 Hours

- 3.1 Concept of habilitation and rehabilitation
- 3.2 Community Based Rehabilitation (CBR) and Community Participatory Rehabilitation (CPR)
- 3.3 Legal provisions, concessions and advocacy

3.4 Vocational rehabilitation: need and challenges

3.5 Issues and challenges in rural settings

Unit 4: Meeting the Challenges of Children with Visual Impairment

4.1 Enhancing prosocial behaviour

4.2 Stress and coping strategies

4.3 Recreation and leisure time management

4.4 Challenges of adventitious visual impairment

4.5 Soft skills and social skills training

Course Work/ Practical/ Field Engagement (Any Two)

Interview family members of three children with visual impairment (congenital/ adventitious and blind, low vision and VIMD) and analyze their reactions and attitude towards the child

Prepare and present a list of activities how parents, siblings, and grandparents can be engaged with the child with visual impairment

Prepare charts/ conduct street plays/ make oral presentations to remove myths related to visual impairment

Visit schools for the visually impaired and make presentations before the parents on Government concessions and auxiliary services available

Essential Readings

Bhandari, R., & Narayan, J. (2009). Creating learning opportunities: a step by step guide to teaching students with vision impairment and additional disabilities, including deafblindness. India: Voice and vision.

Hansen, J. C., Rossberg, R.H., & Cramer, S.H. (1994). Counselling Theory and Process. Allyn and Bacon: USA

Lowenfeld, B. (1969). Blind children learn to read. Springfield: Charles C. Thomas.

Lowenfeld, B. (1973). Visually Handicapped Child in School; New York: American Foundation for the Blind.

Lowenfeld, B. (1975). The Changing Status of the Blind from Separation to Integration. Springfield: Charles C. Thomas.

Mani, M. N. G. (1992). Techniques of Teaching Blind Children. New Delhi: Sterling publishers Pvt. Ltd.

Narayan, J., & Riggio, M. (2005). Creating play environment for children. USA: Hilton/ Perkins.

Shah, A. (2008). Basics in guidance and Counselling. New Delhi: Global Vision Publishing House.

Smith, D. D., & Luckasson, R. (1995). Introduction to Special Education – Teaching in an age of Challenge. (2Ed). USA: Allyn & Bacon.

Suggested Readings

- Bhan, S. (2014). Understanding learners-A handbook for teachers. Prasad Psycho Corporation, New Delhi.
- Early Support for children, young people and families (2012). Information about Visual Impairment, Retrieved from <http://www.ncb.org.uk/media/875236/earlysupportvisimppart1final.pdf>
- Kundu, C. L. (2000). Status of Disability in India. New Delhi: RCI.
- Lowenfeld, B. (1971). Psychological problems of children with impaired vision, Prentice-Hall.

E 2: Disability Specialisation**Hours: 120****Marks: 100**

Sl. No.	Tasks for the Student-teachers	Educational Settings	Disability Focus	Specific Activities	Hrs.	Marks	Submissions
1.1	Reading and writing of standard English braille	College	VI	1. Reading and writing English Braille text. Transcription from print to Braille and vice versa(Grade II)	60 Hours	50	
				2. Braille Mathematics Code: Radicals, fraction (Mixed, complex and hyper complex), sign and symbols of comparison, Shape signs, Greek letters, indices, set, symbols, trigonometric functions	30 Hours	25	
				3. Abacus and Geometric kit	30 Hours	25	

F1: Main Disability Special School**Hours: 120****Credits: 04****Marks: 100**

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setup	No. of Lessons
1	Classroom teaching	VI	Special Schools for VI	Min. 90 school periods

E 1: Cross disability & inclusion**Hours: 20****Marks: 100**

Sl. No.	Tasks for the Student-teachers	Educational Settings	Disability Focus	Specific Activities	Hrs.	Marks	Submissions
1.1	Classroom Observation For school subjects at different levels	1. Special schools other than VI 2. Inclusive schools	1. Other than VI 2. Any Disability	Observation For school subjects at different levels Observation For school subjects at different levels	15 Hrs 15 Hrs	25	
1.2	Orientation and Mobility Training	College Campus and outside campus	VI	a) Sighted Guide Technique b) Pre Cane skills c) Cane technique d) Direction finding technique	60 Hrs		
1.3	Teaching lessons on O&M and ADL	Special and inclusive school	VI and VIMD	Individualized Teaching lessons on orientation and mobility and activities of daily living	30 Hrs	25	

F 2: Other Disability Special School**Hours: 18****Marks: 100**

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setup	Hrs.	Marks
1	1. Classroom teaching, development of TLM, document study, maintenance of record	Other than Visual Impairment	Special Schools for other disabilities	60 Hrs	50
	2. Classroom teaching, development of TLM, document study, maintenance of record	VIMD	Special schools or programmes for Multiple disabilities	60 Hrs	50

F 3: Inclusive School**Hours: 120****Marks: 100**

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setup	Hrs.	Marks
1	Classroom teaching with special focus on functional academic skills e.g., Braille, special equipments, preparation of TLM to facilitate inclusion and creating awareness about the needs of children with disabilities	Visually Impaired, seeing children and teachers	Inclusive schools	120 Hrs	100

AREA D

ENHANCEMENT OF PROFESSIONAL CAPACITIES (EPC)

(Wherever applicable specific reference to disability will be focused)

D17	Reading and Reflecting on Texts
D18	Performing and visual Art
D19	Basic Research Statistic

READING AND REFLECTING ON TEXTS

Course code: D 17

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

One of the core areas that schools focus upon is age appropriate and fluent literacy skills. Hence, aspirant graduates who intend to make career in education must be good readers and good writers (in literally sense). Due to several reasons a student teacher like you may not have adequate skills, interest and motivation for reading and writing. Here is a skill based and activity oriented course designed to give you an opportunity to look at reading writing seriously, relearn it as a professional activity, apply it for students with special needs and enjoy it like never before.

Objectives

After completing the course student-teachers will be able to

Reflect upon current level of literacy skills of the self.

Show interest and begin working upon basic skills required to be active readers in control of own comprehension.

Show interest and begin working upon basic skills required to be independent writers understanding adequate intent, audience and organization of the content.

Prepare self to facilitate good reading writing in students across the ages.

Find reading writing as learning and recreational tools rather than a course task.

Unit 1: Reflections on Literacy

- 1.1 Literacy and Current University Graduates: Status and Concerns
- 1.2 Role of Literacy in Education, Career and Social Life
- 1.3 Literacy, Thinking and Self Esteem
- 1.4 Literacy of Second Language/ English: Need and Strategies
- 1.5 Basic Braille Literacy

Unit 2: Reflections on Reading Comprehension

- 2.6 Practicing Responses to Text: Personal, Creative and Critical
- 2.7 Meta Cognitive Awareness of Reading Processes and Strategies Applied for Meaning Making
- 2.8 Developing Good Reading Skills and Habits in Primary Level Students: Activities and Strategies
- 2.9 Basic Understanding of Reading Comprehension of Children with Disabilities

Unit 3: Skill Development in Responding to Text

- 3.1 Indicators of Text Comprehension: Retelling, Summarizing, Answering, Predicting, Commenting and Discussing

- 3.2 Practicing Responding to Text (Using The Indicators) for Recreational Reading Material (Narrations) and School Textbooks (Description)
- 3.3 Practicing Responding to Text (Using The Indicators) for Reports, Policy Documents and News (Expositions) and Editorial, Academic Articles, Advertisement Copy, Resume (Argumentation)
- 3.4 Practicing Web Search, Rapid Reading and Comprehensive Reading

Unit 4: Reflecting Upon Writing as a Process and Product

- 4.1 Understanding writing as a Process: Content (Intent, Audience and Organization)
- 4.2 Understanding writing as a Process: Language (Grammar, Vocabulary, Spelling)
- 4.3 Understanding writing as a Process: Surface Mechanics (Handwriting, Neatness, Alignment and Spacing)
- 4.4 Practicing Self Editing and Peer Editing of Sample Texts
- 4.5 Practicing Evaluating Students Writing Using Parameters: Productivity, Correctness, Complexity, Text Organization and Literary Richness

Unit 5: Practicing Independent Writing

- 5.4 practicing Writing: Picture Description/ Expansion of Ideas/ Essays/ Stories
- 5.5 Practicing Daily Leaving Writing: Applications/ Agenda - Minutes/ Note Taking
- 5.6 Practicing Converting Written Information into Graphical Representation
- 5.7 Practicing Filling up Surveys, Forms, Feedback Responses, Checklists
- 5.8 Reflections on the Course: From Theory to Practice to Initiating Process to Improve Self

Course Work/ Practical/ Field Engagement

Have a peer editing of independently written essays and discuss your reflections upon this experience

Prepare a feedback form for parents and for teachers focussing on differences in the two forms due to different intent and audience

Develop a short journal of graphical representation of 3 newspaper articles on school education using the options given in 2.4

Visit a book store for young children, go through the available reading material including exercise books, puzzles. etc. and make a list of useful material for developing early literacy skills

Essential Readings

Anderson, R., Hiebert, E., Scott, J., & Wilkinson, I. (1985). *Becoming a Nation of Readers: The report of the commission on reading*. Washington, DC: National Institute of Education and the Center for the Study of Reading.

ASER report of 2015: Pratham Publication

May, F. B. (2001). *Unravelling the seven myths of reading*. Allyn and Bacon: Boston

- McGregor, T. (2007). *Comprehension Connections: Bridges to Strategic Reading*. Heinemann Educational Books.
- Tovani, C., & Keene, E. O. (2000). *I Read It, but I Don't Get It: Comprehension Strategies for Adolescent Readers*. Stenhouse Publishers
- Soundarapandian, M. (2000). *Literacy campaign in India*. Discovery Publishing House: New Delhi.

Suggested Readings

- Aulls, M. W. (1982). *Developing readers in today's elementary school*. Allyn and Bacon: Boston
- Baniel, A. (2012). *Kids beyond limits*. Perigee Trade: New York
- McCormick, S. (1999). *Instructing students who have literacy problems*. (3rd) Merrill: New Jersey
- Ezell, H., & Justice, L. (2005). *Programmatic Research on Early Literacy: Several Key Findings. IES 3rd Annual Research Conference: American Speech Language & Hearing Association (ASHA)*.
- Frank, S. (1985). *Reading without Nonsense*. Teachers College Press, New York.
- Gallagher, K. (2004). *Deeper Reading: Comprehending Challenging Texts*. Stenhouse Publishers
- Heller, R. (1998). *Communicate clearly*. DK Publishing: New York.
- Luetke-Stahlman, B., & Nielsen, D. (2003). *Early Literacy of Kindergartners with Hearing Impairment. High Beam*
- May, F. B. (1998). *Reading as communication*. Merrill: New Jersey
- Miller, D. (2002). *Reading With Meaning: Teaching Comprehension in the Primary Grades*. Stenhouse Publishers, New York.
- Pandit, B., Suryawanshi, D. K., & Prakash, M. (2007). *Communicative language teaching in English*. Nityanutan Prakashan, Pune.
- Paul, P. V. (2009). *Language and Deafness*. Jones and Bartlett: Boston

PERFORMING AND VISUAL ARTS

Course code: D 18

Contact Hours: 30

Marks: 50

Introduction

India has an excellent historical backdrop as well as contemporary talents in the field of art. However, it is debatable whether the same has been translated into our school system effectively. Do most of our students get exposure to a variety of activities involving knowing, exploring and appreciating art? Most probably they do not. It is time that we take a fresh look at what art education is and what role it plays in school education. More than anything, art education is also expected to enhance learning. And do teachers know how to go about it to achieve it? Here is an opportunity to facilitate the art within you which in turn will reflect art in within students.

For a student-teacher with disability appropriate learning alternatives are to be given by the college. For example, a candidate with blindness must get alternative learning opportunities and evaluative tasks for visual art or a candidate with deafness for music art – if and when needed.

Objectives

After completing the course student-teachers will be able to

- Exhibit Basic understanding in art appreciation, art expression and art education.*
- Plan and implement facilitating strategies for students with and without special needs.*
- Discuss the adaptive strategies of artistic expression.*
- Discuss how art can enhance learning.*

Unit 1: Introduction to art Education

- 1.1 Art and art education: Meaning, scope and difference
- 1.2 Artistic expression: Meaning and strategies to facilitate
- 1.3 Art therapy: Concept and application to students with and without disabilities
- 1.4 Linking Art Education with Multiple Intelligences
- 1.5 Understanding emerging expression of art by students

Unit 2: Performing Arts: Dance and Music

- 2.1 Range of art activities related to dance and music
- 2.2 Experiencing, responding and appreciating dance and music
- 2.3 Exposure to selective basic skills required for dance and music
- 2.4 Dance and Music: Facilitating interest among students: planning and implementing activities
- 2.5 Enhancing learning through dance and music for children with and without special needs: Strategies and Adaptations

Unit 3: Performing Arts: Drama

- 3.1 Range of art activities in drama
- 3.2 Experiencing, responding and appreciating drama
- 3.3 Exposure to selective basic skills required for drama
- 3.4 Drama: Facilitating interest among students: planning and implementing activities
- 3.5 Enhancing learning through drama for children with and without special needs: strategies and adaptations

Unit 4: Visual Arts

- 5.6 Range of art activities in visual arts
- 5.7 Experiencing, responding and appreciating visual art
- 5.8 Exposure to selective basic skills in visual art
- 5.9 Art education: Facilitating interest among students: planning and implementing activities
- 5.10 Enhancing learning through visual art for children with and without special needs: strategies and adaptations

Unit 5: Media and Electronic Arts

- 5.1 Range of art activities in media and electronic art forms
- 5.2 Experiencing, responding and appreciating media and electronic arts
- 5.3 Exposure to selective basic skills in media and electronic arts
- 5.4 Media and electronic arts: Facilitating interest among students: planning and implementing activities
- 5.5 Enhancing learning through media and electronic art for children with and without special needs: strategies and adaptations

Course Work/ Practical/ Field Engagement

‘hot seating’ activity for historical / contemporary personalities wherein students play the role of that personality to advocate his/her opinions/decisions/thought processes (for example, Akbar, Hitler, Galileo, Bhagat Singh etc)

Portfolio submission of the basic skills exposed in any one of the art forms of choice

Write a self reflective essay on how this course on art will make you a better teacher

Learn and briefly explain how music notations are made. Submit a brief report OR learn and explain the concept of composition in visual art. Submit a brief report. OR make and submit a sample advertisement for a product OR Learn Mudras of a classical dance forms and hold a session for the students on that. Submit photo report of the same OR Carry out web search on Indian sculpture and submit a brief compilation

Observe an art period in a special school and briefly write your reflections on it

Essential Readings

- Finlay, Victoria. The brilliant History of Color in Art. Getty Publications, China.
- Shirley, Greenway. (2000). Art, an A to Z guide. Franklin Watts: USA
- Vaze, Pundalik. (1999). How to Draw and Paint Nature. Jyosna Prakashan: Mumbai
- Ward, Alan. (1993) Sound and Music. Franklin Watts: New York.

Suggested Readings

- Baniel, Anat. (2012). Kids beyond limits. Perigee Trade: New York
- Beyer, E. London. (2000). The arts, popular culture and social change
- Efland, A. D. (1990). *A history of Art Education: Intellectual and social currents in teaching the visual arts*. New York, NY: Teachers College Press.
- Gair, S. B. (1980). Writing the arts into individualized educational programs. *Art Education*, 33(8), 8–11
- Greene, S., & Hogan, D. (2005). Researching children's experience. Sage Publication: London
- Heller, R. (1999). Effective Leadership. DK Publishing: New York.
- Lewiecki-Wilson C. & B. J. Brueggemann (Eds.), Disability and the teaching of writing: A critical sourcebook. Boston, MA: Bedford/St. Martin's.
- Nyman, L. & A. M. Jenkins (Eds.), *Issues and approaches to art for students with special needs* (pp. 142–154). Reston, VA: National Art Education Association.

BASIC RESEARCH AND STATISTICS

Course code: D 19

Contact Hours: 30

Marks: 50

Objectives

After completing the course student-teachers will be able to

Describe the concept and relevance of research in education and special education.

Develop an understanding of the research process and acquire competencies for conducting a research.

Apply suitable measures for data organization and analysis.

Unit 1: Introduction to Research

- 1.1 Scientific Method
- 1.2 Research: Concept and Definition
- 1.3 Application of Scientific Method In Research
- 1.4 Purpose of Research
- 1.5 Research in Education and Special Education

Unit 2: Types and Process of Research

- 2.1 Types of Research
 - Basic/Fundamental
 - Applied
 - Action
- 2.2 Process of Research
 - Selection of Problem
 - Formulation of Hypothesis
 - Collection of Data
 - Analysis of Data & Conclusion
- 2.3 Tools of Research: Tests, Questionnaire, Checklist and Rating Scale
- 2.4 Action Research in Teaching Learning Environment
- 2.5 Professional Competencies for Research

Unit 3: Measurement and Analysis of Data

- 3.1 Scale for measurement: Nominal, Ordinal, Interval and Ratio
- 3.2 Organization of data: Array, Grouped distribution
- 3.3 Measures of central tendency and Dispersion: Mean, Median and Mode, Standard deviation and Quartile deviation
- 3.4 Correlation: Product Moment and Rank Order Correlation
- 3.5 Graphic representation of data

Practicum/ Field Engagement

- Develop a teacher made test for a given subject matter
- Develop a questionnaire/checklist
- Develop an outline for conducting action research

Essential Readings

- Best, J. W., & Kahn, J. V. (1996). *Research in Education* Prentice-Hall of India New Delhi.
- Dooley, D. (1997). *Social Research Methods*. Prentice-Hall of India, New Delhi.
- Grewal, P.S. (1990). *Methods of Statistical Analysis*. Sterling Publishers, New Delhi.
- Guptha, S. (2003). *Research Methodology and Statistical Techniques*. Deep & Deep Publishing, New Delhi.
- Koul, L. (1996). *Methodology of Educational Research*. Vikas Publishing House, New Delhi.
- Potti, L.R. (2004). *Research Methodology*. Yamuna Publications, Thiruvananthapuram.

Suggested Readings

- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Academic Press, New York.
- Greene, S., & Hogan, D. (2005). *Researching children's experience*. Sage Publication: London..