# DISABILITY SPECIALIZATION (C) SEMESTER - IV

# C14 - EDUCATIONAL INTERVENTION AND TEACHING STRATEGIES FOR CHILDREN WITH VISUAL IMPAIRMENT

Credits: 4 Internal: 40 marks

Hours/Week: Theory-4hrs External: 60 marks

Total: 100 marks

#### **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 forchildren with visual impairment. For this purpose, the required intervention and teachingtechniques and skills are highlighted. The student-teachers, it is hoped, will find the course highly stimulating, as it will enablethem to help blind and low vision students to cope effectively with the challenges of curriculum transaction, at par with their sighted peers.

## **Course Learning Outcomes:**

At the end of the course, the student-teachers will be able to

- explain various theoretical perspectives related to intervention and 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;
- develop necessary skills for adapting TLM in teaching Social Science and assessment of the learners with special reference to children with visual impairment;
- implement techniques and procedures for developing reading and writing skills in children with low vision and setting the classroom adequately; and
- assess the sight of a child with low vision and plan a teaching schedule.

## **Unit 1: Theoretical Perspectives**

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

#### **Unit 2: Mathematics**

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

#### **Unit 3: Science**

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

#### **Unit 4: Social Science**

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

## **Unit 5: Teaching of Children with Low Vision**

Visual Stimulation: Concept and Procedure - Selection of an appropriate medium of reading and writing - Techniques and procedures for developing reading and writing skills - Orientation and Mobility for low vision children- 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/ SocialScience.
- 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.

## **Suggested Readings**

- Fernandez, G., Koening. C., Mani. M.N.G., & Tensi. S. (1999). See with the Blind.Books for Change, Banglalore.
- Jackson, J. (2007). Low Vision Manual. Edingurgh: Butterworth Heinemann/Elsevier, Edingurgh.
- Jose, R. (1983). Understanding Low Vision. American Foundation For The Blind. New York.
- Lowenfeld, B. (1973). The Visually Handicapped Child in School. John DayCompany, New York.
- Lydon, W. T., & McGraw, M. L. (1973). Concept Development for VisuallyHandicapped 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 SpecialEducation.
   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 PublishersPvt. 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 HesperianFoundation, 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 handicappedchildren and youth: Theory and Practice. AFB Press, New York.
- Vijayan, P.., &Gnaumi, V. (2010). Education of children with low vision.
   KanishkaPublication, New Delhi.
- Agrawal, S. (2004). Teaching Mathematics to Blind Students through ProgrammedLearning Strategies. Abhijeet Publication, Delhi.
- Pandey, V. P. (2004). Teaching of mathematics. SumitPublication, New Delhi.
- Status of Disability in India. (2012). Rehabilitation Council of India, New Delhi.

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