APPENDIX – I

PERSONAL DATA SHEET

1. Name of the student : 

2. Name of the school : 

3. Gender : Male / Female

4. Age :

5. Religion : Hindu / Christian / Muslim / Others


7. Type of school : Aided / Unaided / Government

8. Locality of the School : Urban / Semi Urban

9. Educational Qualification of Father : S.S.L.C. / Hr. Sec. / Graduate / Post Graduate or Professional

10. Educational Qualification of Mother : S.S.L.C. / Hr. Sec. / Graduate / Post Graduate or Professional

11. Occupation of Father : Unemployed/Daily Wages Earners / Farmers / Semiskilled Workers / Regular Employee in the Office / Businessman / Executive or Professional
12. Occupation of Mother: House Wife / Daily Wages Earners / Farmers / Semiskilled Worker / Regular Employee in the Office / Businessman / Executive or Professional

13. Monthly Income of Father: Less than Rs.10,000 / Rs.10,000-25,000 / Rs.26,000-40,000 / Above Rs.40,000

14. Monthly Income of Mother: Less than Rs.10,000 / Rs.10,000-25,000 / Rs.26,000-40,000 / Above Rs.40,000

15. Nature of Blindness: Born blind / Middle blind

16. Type of Blindness: Total blindness / Low vision

17. Are you aware of the technologies available for blind people?: Yes / No

18. If Yes, mention the type:

Signature / Thumb Impression
APPENDIX – II

PRE-TEST - QUESTIONNAIRE

NAME OF THE STUDENT: _____________________

STD : _____________________

CHOOSE THE CORRECT ANSWER AND PUT THE APPROPRIATE
ALPHABET LETTER IN THE BOX:

1. The biotic factor of an ecosystems are _______
   A. Light  B. Wind
   C. Plants  D. Water

2. Green plants are __________
   A. Consumers  B. Producers
   C. Decomposers  D. Carnivores

3. Herbivores are __________
   A. Primary consumers  B. Secondary consumers
   C. Tertiary consumers  D. Decomposers

4. The Abiotic factor of an ecosystem are: __________
   A. Light and wind  B. Green plants
   C. Fungi  D. Mushrooms

5. The process of eating and being eaten by the organism is called:
   A. Food web  B. Food chain
   C. Ecological pyramid  D. Energy flow
6. The decomposers of an ecosystem are:
   A. Bacteria and fungi  B. Plants
   C. Wind  D. Water

7. Carnivores are:
   A. Secondary consumers  B. Primary consumers
   C. Tertiary consumers  D. Decomposers

8. Decomposers are otherwise called as:
   A. Photoreceptors  B. Reducers
   C. Converter  D. Observer

9. Tiger is an example for:
   A. Primary carnivores  B. Secondary carnivores
   C. Herbivores  D. Producers

10. Pond is a:
    A. Terrestrial ecosystem  B. Fresh water ecosystem
    C. Salt water ecosystem  D. Natural ecosystem

11. The rate of total production of organic matter by the producers per unit area and time is known as
    A. Gross productivity  B. Primary productivity
    C. Secondary productivity  D. Net productivity

12. During photosynthesis plants converts solar energy into ________
    A. Electric energy  B. Chemical energy
    C. Thermal energy  D. Potential energy
13. The direction flow of energy in an ecosystem is always:
   A. Unidirectional     B. Bidirectional
   C. Both Uni and Bidirectional   D. None of these

14. The graphic representation of a number of individuals or energy or biomass in various trophic levels of a food chain is known as:
   A. First trophic level     B. Second trophic level
   C. Third trophic level   D. Ecological Pyramids

15. The increasing temperature of the atmosphere is known as:
   A. Greenhouse effect     B. Soil erosion
   C. Deforestation   D. Pollution

16. Deforestation is the main cause of:
   A. Noise pollution     B. Soil pollution
   C. Thermal pollution   D. Water pollution

17. Noise pollution is harmful for our:
   A. Ear     B. Lungs
   C. Kidney   D. Heart

18. Ecological pyramid of an ecosystem are also called as:
   A. Eltonian pyramids     B. Food chain
   C. Food web   D. Energy flow

19. The number of organisms in each trophic level can be represented by:
   A. Pyramid of biomass     B. Pyramid of numbers
   C. Pyramid of energy   D. Pyramid of food
20. The substances that cause pollution is known as:
   A. Pollutants  B. Organoids  
   C. Insecticides  D. Pesticides

21. The expansion of deserts (desertification) is caused by:
   A. Soil erosion  B. Deforestation  
   C. Pollution  D. Acid rain

22. The factor responsible for soil erosion are:
   A. Water and wind  B. Global warming  
   C. Acid rain  D. Ozone hole

23. The substance responsible for ozone depletion is:
   A. Sulphur dioxide  B. Chloro fluro carbon  
   C. Carbon dioxide  D. Carbon monoxide

24. Ozone layer, protect the earth from falling of
   A. Ozone hole  B. Acid rain  
   C. Air pollution  D. Soil erosion

25. Damage to historic monuments like Taj Mahal is due to
   A. Ozone hole  B. Acid rain  
   C. Air pollution  D. Soil erosion
APPENDIX – III
POST-TEST- QUESTIONNAIRE

NAME OF THE STUDENT : -------------------
STD: -------------------

CHOOSE THE CORRECT ANSWER AND PUT THE APPROPRIATE ALPHAPET LETTER IN THE BOX:

1. First trophic level of an ecosystem are
   A. Producer                 B. Decomposers
   C. Consumers               D. Carnivores

2. Organisms that feed on herbivores are called:
   A. Primary carnivores       B. Secondary carnivores
   C. Tertiary carnivores      D. Decomposers

3. An example for macro ecosystem is:
   A. Lake                     B. Pond
   C. River                    D. Ocean

4. The flow of energy from one trophic level to another trophic level of an ecosystem is known as
   A. Food chain               B. Food web
   C. Energy flow              D. Ecological pyramid

5. Interconnected food chain is known as:
   A. Food web                 B. Energy flow
   C. Tropic level             D. Ecological pyramid

6. The amount of an organisms in each trophic levels of a food chain can be represented by
   A. Pyramid of numbers       B. Pyramid of biomass
   C. Pyramid of energy        D. Pyramid of food
7. The contamination of the environment with man’s waste is known as
   A. Pollution   B. Pollutants
   C. Soil erosion D. Deforestation

8. Global warming is also known as
   A. Greenhouse effect   B. Desertisation
   C. Soil eruption D. Desertification

9. Acid rain is caused by:
   A. Ammonia   B. Carbon monoxide
   C. Sulphuric acid and Nitric acid D. Carbon dioxide

10. The removal of the top layer of the soil is known as
    A. Soil erosion   B. Acid rain
    C. Deforestation D. Terracing

11. Global warming is caused by
    A. Carbon monoxide   B. Carbon dioxide
    C. Sulphur dioxide D. Nitric oxide

12. One of the methods of conservation is
    A. Terracing   B. Deforestation
    C. Agriculture discharge D. Removal of pollutants

13. Soil pollution is caused by
    A. Automobiles   B. Volcanic eruptions
    C. Pesticides D. Industries

14. Air pollution will affect our
    A. Skin   B. Lungs
    C. Kidney D. Stomach

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15. Main source of water pollution is
   A. Sewage         B. Automobiles
   C. Aircrafts      D. Trains

16. The method to control noise pollution is
   A. Planting of trees
   B. Recycling of waste
   C. Removal of pollutants
   D. Using filters

17. Self feeder is:
   A. Producer
   B. Consumer
   C. Herbivores
   D. Decomposers

18. The process by which the complex organic substance are broken down into
    simple inorganic raw material is known as
   A. Productivity
   B. Decomposition
   C. Nutrient cycling
   D. Energy flow

19. In an ecological pyramids, the organism occupying at the base are:
   A. Carnivores
   B. Herbivores
   C. Producers
   D. Decomposers

20. Reutilization and recycling of waste is the method of controlling
    A. Noise pollution
    B. Water pollution
    C. Air pollution
    D. Soil pollution

21. The phenomenon through which certain pollutants get accumulated in
    organism in higher concentration through food chain is called as
    A. Biological magnification
    B. Eutrophication
    C. Algal blooms
    D. Vaccination

22. Increasing nutrient content of water, called eutrophication is due to
    A. Noise pollution
    B. Air pollution
    C. Water pollution
    D. Soil pollution
23. Biological oxidation is the method to control
   A. Water pollution   B. Air pollution
   C. Thermal pollution   D. Noise pollution

24. Increase in the concentration of soluble salts (salinisation) will affect the
   A. Soil pollution   B. Water pollution
   C. Noise pollution   D. Air pollution

25. Main source of Air pollution is:
   A. Automobiles   B. Television
   C. Radio   D. Computer
## APPENDIX – IV

### PRE-TEST - ANSWER KEY

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<td>1.</td>
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<td>6.</td>
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<td>Bacteria and fungi</td>
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<tr>
<td>7.</td>
<td>a</td>
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<td>8.</td>
<td>b</td>
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<td>Ear</td>
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<td>a</td>
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## APPENDIX – V

### POST-TEST - ANSWER KEY

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<td>3. d Ocean</td>
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<td>6. b Pyramid of biomass</td>
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<td>7. a Pollution</td>
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<td>8. a Greenhouse effect</td>
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<td>10. a Soil erosion</td>
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<td>13. c Pesticides</td>
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<td>15. a Sewage</td>
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<td>21. a Biological magnification</td>
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<td>23. a Water pollution</td>
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<td>25. a Automobiles</td>
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APPENDIX- VI - PHOTOS

A VISUALLY IMPAIRED BOY USING JAWS SOFTWARE

A VISUALLY IMPAIRED GIRL LEARNING WITH JAWS
AN ELECTRONIC BRAILLER

RECENT ICT FACILITIES FOR VISUALLY CHALLENGED PEOPLE
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INCLUSIVE EDUCATION FOR THE VISUALLY CHALLENGED CHILDREN IN REGULAR SCHOOLS UNDER SSA SCHEME IN INDIA - AN EXPLORATION

S. Balaji,
Research Scholar, Manonmaniam Sundaranar University,
Tirunelveli - 627 012

Dr. K.S. Ramakrishnan
Assistant Professor, School of Education,
Tamilnadu Open University, Saïdapat, Chennai - 600 015.

ABSTRACT:

As per the census 2001, visually challenged children and adults constitute about 50% of the total disabled population hence the need for proper and systematic arrangements for their education and employment. It is widely recognized that now the children with visual impairment have educational needs which are quite distinct and unique as compared to other disability groups due to various reasons. About 80-90% knowledge and information is gained through the sense of sight. The absence of which necessitates special compensatory teaching. VI children naturally have no use for visual information – visual inputs for learning. Consequently they require highly individualized modes of instruction, much more than other disability groups. VI children require text books in alternative formats. These children require alternative devices for each basic educational task as writing, arithmetic work, mobility, concept development etc. As a consequence, article 24 of UNCRPD while stating the education of all disability groups as basic human rights recognized the special needs of children with visionless, H-B and HI. Therefore for inclusive education to be successful, it is essential that the special educational implication of VC children is properly and meticulously addressed. This paper deals inclusive educational approach than the integration and intrusive approaches.

Key Words: Visually Challenged, Inclusive Education, Special Education, Hearing Impairment, Sarva Shiksha Abhiyan

Introduction: The specific approach suggested in this paper for ensuring effective educational inclusion of VI children has following objectives.

a. To enable VC children enrolled in government school under SSA to acquire a requisite proficiency in such essential course skills as reading, writing, arithmetic, orientation and mobility and activities of daily living.

b. To provide these children ready access to all text books in Braille large print and basic assistive device.

c. To arrange for the profession of special educates trained in teaching blind children in the required numbers.

d. To enable these children to have maximum opportunity to function to their fullest potential at par even better as compared to the sighted counter parts in inclusive educational setting under SSA.

Methodology: Special short duration training course may be organized to prepare skilled and competent special educator in the SSA system, to look after the educational needs of children with visual impairment. Details of the suggested course are set for this below.

a. Capacity building.

b. Short term

Focus: Training in practical skill relating to the education of visually impaired children.

Duration: 3 months per course, with 3 courses in a year at each training institution for the teachers of the blind the country has at present above 25 such institutions and university departments.

Intake: 25 candidates per training under total about 1800 teachers to be trained per year.

Entry Qualification: General DTED – B.Ed., are training in special education in a disability other than VI children.
Content: Minimum of theory dealing, primarily with facts like attitudes and educational implications of VI, intensive training in practical skills such as Braille reading and writing, orientation and mobility, independent living skills, use of basic educational devices and cognitive development.

Delivery Mechanism: The suggested training courses to be delivered at existing institutions for the training of teachers of the blind run-founded by NIVH state governments NGO’s university departments, running degree courses in VI.

Immediate need: Anyone or a combination of the following innovative approaches may be used for addressing the immediate needs of VI children till such time as the required special teachers are prepared:

A. Trained teachers from special schools, may take on deputation under SSA to function as special educators for VI children for 2-3 years

B. Carefully designed and monitored residential bridge courses be organized for VI children being provided training in the core skills at residential school as a temporary measure with arrangement for careful monitoring and following up to ensure that the learnt skills are actually used when their children return to inclusive schools.

C. Services of retired trained special teachers may be utilized wherever possible.

D. Trained teachers rendered jobless with a large number of NGO’s as a result of the discontinuation of the centrally sponsored scheme for elementary education, may be utilized.

E. Close linkage may be established between state SSA and existing training institutions to ensure through campus interviews the appointment of teachers as they complete their training at this centers. This will facilitate exchange of information about already trained and unemployed candidates who could be appointed as and when required.

School preparedness: SSA’s must ensure that all VI children will get textbook in Braille or large print before the commandment of the academic session in line with the recent order of the government of India. Similarly, there schools should have the requisite stock of basic assistive devices as per a devised checklist to be questioned out by the concerned central SSA unit in the ministry of (HRD) department of school education and literacy in consultation with leading organization of the blind the MHRD may constitute a high level group to go into the procedure of ensuring prompt supply of text books and assistive device for the concerned schools. The group may consist of senior officials from HRD, SJF and E. and NIVH as well as & representatives from NGO’s each BRC under SSA to have a fully equipped and systematically resource room. Barrier free access schools with VI children should have the following free access facilities:

a) Keep signals at the school entrance gate
b) Textile texture at the top and bottom of staircases
c) Braille for large print signatures at important class room, offices etc.

Other suggestions with regard to capacity building: A model one or two day duration may be formulated with the help of leading blindness organization for the sensitization to VI of state project directors and state SSA coordinators to deliver preferably by NUEPA in conjunction with blind organization. One week orientation courses in VI may be prepared for general class room teachers and conduct by NIVH regional centre teachers training centers blindness organization. A short orientation course duration for 5 days may be formulated and delivered by existing DRC’s, BRC’s conjunction with state NGO’s. Funds for conducting courses suggested above to be made through SSA Budget.

Conclusion: Advisory committee may be set up at state and district levels are existing once revamped with the inclusion of concerned government officials, educators of the blind along with representatives of affiliates of national blindness organization by the committee review work being done for the VI in the concerned SSA’s schools and make corrective suggestions. The committees may meet every 2 months in the districts and by annually in states. The finding of the committees should be made binding for the concerned heads of schools. At school level test should be conducted regularly is the essential course skill under reference as a part of terminal examinations. Reports of these tests may be invariably submitted to the district and state committees for their review and commands.

References

WWW.EPA.NIC.in
CCDISABILITIESINDIA.COM
NAVMUMBAI@VSNL