Abstract

As Education to the visually challenged was fully based on ‘Braille Technology’ in the earlier era, many V.I students with some remaining vision or with residual visual efficiency hesitated to receive Braille in order to avoid to be stamped as ‘Blind’. They tried their level best to read the books using their remaining vision taking much risk. Even the regular class room teachers also felt in cross roads in getting the responses/answers from the children with low vision, ‘Low vision Care’ in the educational setup is a still a typical care in all the three types of educational programs for the past several years, even the children with residual vision/ moderate visual efficiency have been educated with Braille methodology only. But from the experience of the special Educators it has been understood that much more things in the area of ‘Educational services to the children with Low vision’ are still kept wide open. The Special educators working in all three types of programs are still in cross roads, in educating the children with ‘Low vision’. At this juncture, the investigator put forth his efforts to study the educational services to be executed by the special educators to satisfy the needs of the children (VI) with Low vision.
1. INTRODUCTION

‘Education’ is the manifestation of perfection already in man” are the golden words of Swami Vivekananda. The main purpose of education is to bring out the inner potentialities of human souls. Education is unavoidable, inevitable and of much use in our day today existing life career. In our current society without education human life is meaningless. So Education is confidently a lifelong process of acquiring new ideas, skills, experiences through both formal and informal exposure to information, ideas and experiences. Education is a growing academic discipline. The theme of ‘Education to the differently abled children’ also should be focused at the same idea. Today it is truly accepted that ‘Every birth cries for education’. Education plays a vital role in every aspect of our society at present. The Society of the visually challenged, Hearing Impaired, Mentally retarded, physically challenged etc. are not exempted to this regard.

As far as Education for the visually challenged is concerned, it received the main focus only after our independence from the British. In 1960’s some special schools for the visually challenged children in the name “School for the Blind” were begun here and there in India. Apart from the government schools, some private voluntary agencies also showed more interest in feeding education to the visually impaired children by inaugurating “Special school for the Blind”. It has been a set up till today for the children with visual loss where the blind children only are studying and living together having ‘A dark Society’. In order to rectify the demerits of this setup and in order to make the Differently abled children to survive with the normal society, ‘Integrated Education for visually Handicapped’ was established in 1980’s at Sri Ramakrishna Vidyalaya, Coimbatore. Later it has been flourished throughout the country in the name of Integrated Education/Inclusive Education by the non-governmental agencies as well as government services such as SSA, RMSA etc;

2. STATEMENT OF THE STUDY

To study and exhibit the necessary educational services to be executed by the special educators towards the education of the children with ‘low vision’ the investigator has taken up this research on Educational services to be rendered by the special educators to the children with ‘low vision’, which is the entitled title of the study here. This study focuses on the educational services to the children with ‘Low vision to be executed by the special educators working in the special schools for the blind and integrated normal schools.

3. OBJECTIVES OF THE STUDY

I. To find out the special educators’ views over the educational services to be executed by them to the children with ‘Low vision’.

II. To find out the educational services to be rendered to the children with ‘low vision.'
4. METHODOLOGY
I. The investigator has studied the attitude and opinions of the special educators regarding the educational services to the children with Low vision.
II. He has also made an analysis of comparisons of the response scores received from the special educators.

4.1 Sample
The special educators 40 from SSA (IED) schools and 40 from the schools for the blind in the schools nearby Madurai who are dealing with the children with some residual vision are considered as the sample for this study.

4.2 Tools used for the study
The 5 point attitude scale developed by Likert is used as a tool for this study. This questionnaire contains 40 favourable and 40 unfavourable questions. Each statement contains five aspects namely Strongly Agree, Agree, No opinion, Disagree, Strongly Disagree.

4.3 Data gathering Process
The Investigator met all the special educators in person supplying the questionnaire individually to the special educators he collected the necessary data from all the 80 special educators from both setups.

5. Analysis and Interpretation
The Investigator for this study designed the questionnaire covering 11 major services to be rendered to the children with Low Vision (V.I). The received responses from the special educators based on their ideas, attitude towards the services to the children with Low vision are considered for the analysis. For favourable items the scores are given as 5-S.A, 4-A, 3-N.O, 2-S.D.A, 1-D.A, for the unfavourable items in the reverse order.

Table1- General Scores of IED/Special Schools Special Educators

<table>
<thead>
<tr>
<th>Class Interval</th>
<th>F</th>
<th>D</th>
<th>D²</th>
<th>FD</th>
<th>FD²</th>
<th>C.F</th>
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</thead>
<tbody>
<tr>
<td>290-299</td>
<td>1</td>
<td>-5</td>
<td>25</td>
<td>-5</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>300-309</td>
<td>1</td>
<td>-4</td>
<td>16</td>
<td>-4</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>310-319</td>
<td>4</td>
<td>-3</td>
<td>9</td>
<td>-12</td>
<td>36</td>
<td>6</td>
</tr>
<tr>
<td>320-329</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>-18</td>
<td>36</td>
<td>15</td>
</tr>
<tr>
<td>330-339</td>
<td>9</td>
<td>-1</td>
<td>1</td>
<td>-9</td>
<td>9</td>
<td>24</td>
</tr>
<tr>
<td>340-349</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>350-359</td>
<td>14</td>
<td>1</td>
<td>1</td>
<td>14</td>
<td>14</td>
<td>49</td>
</tr>
<tr>
<td>360-369</td>
<td>12</td>
<td>2</td>
<td>4</td>
<td>24</td>
<td>48</td>
<td>61</td>
</tr>
<tr>
<td>370-379</td>
<td>8</td>
<td>3</td>
<td>9</td>
<td>24</td>
<td>72</td>
<td>69</td>
</tr>
<tr>
<td>380-389</td>
<td>7</td>
<td>4</td>
<td>16</td>
<td>28</td>
<td>112</td>
<td>76</td>
</tr>
<tr>
<td>390-399</td>
<td>4</td>
<td>5</td>
<td>25</td>
<td>20</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>sum</td>
<td>N=80</td>
<td>62</td>
<td>468</td>
<td></td>
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</tr>
</tbody>
</table>

The Significance was found out by using ‘t’ test in this study.
6. FINDINGS

From this table, the calculated mean value is 355.4 and the standard deviation is 26.34. The skewness is 0.23 and ‘ku’ value is 0.21. So it is Leptokurtic. This reflected that the special educators working in both various setups have shown the same, high degree of acceptance towards the educational services to be executed by the special educators to the children with low vision. The calculated ‘t’ value 1.42 is less than the tabulated ‘t’ value 1.99 at 0.05 significant level. This represents that there is no significant difference between the general scores of the special educators working in the special schools for the blind and those who are working in the SSA (IED) schools regarding the educational services to be rendered by the special educators to the children with residual vision. It is clear that both the sectors ie; special educators working in the school for the blind and IED (SSA) schools have shown their strong acceptance in executing the educational services to the children with Low vision which are completely away from the Braille methodology. The following are the essential educational services to the children with low vision to be executed by the special educators:

**Services to the children with Low vision**

(i) Vision Screening

- Distance visual Activity
- Near vision Activity
- Visual field
- Colour contrast
- Colour vision

These tests have to be conducted using Snelling chart, E card, near vision card with N 48, N 20, N 8 size letters. On the responses of the distance visual acuity and near vision acuity tests, the educational services either Braille or large print or print with magnifiers has to be decided. By testing the visual field the mobility techniques cane/sighted guide has to be provided. On the basis of colour, contrast tests the ink and the font size of letters to be used has to be decided.

(ii) Causes and educational implications

The teacher has to extend the proper educational service to the Low vision child after confirming the cause for the visual impairment on the basis of the certificate/consultation of the ophthalmologist.

(iii) Assessment of Functional Vision

Before the assessment of the visual functioning the special educators ought to concentrate the following;

1. Determination of current visual functioning level of each child.
2. Determination of the visual stimulation and instruction needed.
3. To help the child to use his/her limited vision to the highest potential.
4. To use visual stimulating materials most appropriate to the child.
5. Determination of nature of the primary reading medium.
Functional assessment is an on-going process. The special educators have to assess the various skills in visual functioning.

a) Optical functioning
   1. Visual Awareness
   2. Visual Attention
   3. Visual Fixation
   4. Visual Focus
   5. Visual Fusion
   6. Visual Tracking
   7. Visual Scanning

b) Perceptual functioning
   1. Visual Discrimination
   2. Visual Memory
   3. Visual Closure
   4. Figure Ground
   5. Mobility
   6. Visual Motor co-ordination
   7. Spatial Relations

The function assessment and training should go in hand. The Observations from this assessment should be shared with parents, colleague and regular class room teachers.

(iv) Activities to develop various basic skills
   a) Scanning and search Procedures
   b) Shapes and Object Constancy
   c) Object naming and recognition
   d) Discrimination of details-3D objects (ex: pen, watch, ball)
   e) Discrimination of details-2D shapes & representation (ex: Puzzles, books, Drawings can offer appropriate practice in this skill)
   f) Perception of 2D objects
   g) Perception of 2D-book illustration
   h) Symmetry & Patterns
   i) Communication by means of body and facial gestures
   j) Hand-eye Co-ordination
   k) Colour Discrimination
   l) Direction & Movement Perception

(v) Activities to develop Independent visual reading skills
   (a) Word symbols with objects and action pictures
   (b) Picture puzzles
   * Labels to things in the class room
   * Action words--;jump, run
   * Album
(c) Individual letter and work symbols
* Discrimination
* Recognition
* Identification
(d) Visual Reading from simple materials
* Known songs, stories & verses
* Let the L.V children to draw picture
* Let the children to speak about their picnic
* To build a sentence from group of words
* Use text books
* Make them to listen short stories
* Diminishing gradually the print size of letters.

(vi) Activities to increase reading speed
* Check fast reading
  I
  I played
  I played cricket
  I played cricket yesterday
* Systematic scanning techniques
* Teach them to use the principle of ‘Continuity’.
* Allow them to use line markers/slitted papers
* Let them use L.V aids and equipments.

(vii) Activities to develop Independent writing skills
* Hand-eye Co-ordination
* Pre-writing activities
* Hand manipulating activities
* Specific writing activities

(viii) Activities to develop related skills
* Sight & small
* Sight & Touch
* Sight & Sound
* Sight & Taste
* Art experience
* Craft experience
* Movements
* Music
* Science practical experiences

(ix) Teaching & Training Activities
(a) Curricular activities
  For print readers
  * Reading print books/large print materials
* Enlargement of print with magnifiers
* Colourful picture books
* Large Print diagrams
* Large Print Essays, book matter etc;
* Underlining with fluorescent pens
* Audio-cassettes, CDs etc;
* Flash cards
* 2D album

(b) Co-curricular activities
   * Physical education
   * Craft
   * Art
   * Music
   * Movement (Drama, Dance, etc;)
   * Science (Laboratory work)

(c) Plus-Curricular Activities
   * Sensory skills
   * Training to use special devices
   * Orientation & Mobility
   * Daily living skills

(x) Low vision Devices & Facilities

(a) Optical Devices
   * Strong Magnifier
   * Glasses with special prescriptions
   * Tinted lenses
   * Pocket scope
   * Electronic Magnification
   * Magnifying sheets

(b) Non-Optical Devices
   * White board
   * Writing paper
   * Signature Card
   * Usage of Dark colour scale
   * Typo scope
   * Black ink pen
   * Audio-Recorder, Cassettes, CDs
   * Adjustable Reading stand
   * Fluorescent High lighter
   * Table lamp
   * Large print books/materials
   * Black slate/chalk board
* Good lighting
* Using finger while reading
(xi) Other Aspects on ‘Low vision services’
  * Parents Counselling
  * Routine eye examination and counselling
  * Record keeping
  * Visual Aids-Usage
  * Legibility of print
  * Classroom Adjustments

7. RECOMMENDATION

a. The services to the children with low vision mainly focus on the maximum usage of the residual vision. It is strongly believed that the visual efficiency of the eyes can be improved through practice. To execute the educational services to the children with low vision the teachers have to undergo proper training before the intervention in executing this service.

b. The children with low vision should be encouraged to utilise the remaining vision to the maximum potential. Their parents have to be educated well in this manner.

c. Every school should be provided with a Low vision laboratory and a specialist to expedite the educational services to the children with low vision.

d. The children with low vision should be psychologically motivated to utilize the facilities prescribed for the children with low vision.

e. Periodical check up with the ophthalmologists should be kept in a record and the training has to be moderated by the special educators then and there.

f. Provision of teaching aids, ophthalmic devices have to be determined by the educators on the basis of the medical reports from the ophthalmologists and the test reports conducted by the special educators.

g. Parents’ & regular classroom teachers’ periodical meetings for counselling have to be conducted and analysed about the children’s on-going career.

h. Low vision laboratory should be equipped with varieties of optical aids, non-optical devices and devices.

8. CONCLUSION

Generally speaking though this category of children with Low vision comes under Visual impairment, the educational services to both categories are /have to be different. This kind of separate services with the use of optical devices or large print or printed book with the use of magnifiers/optical devices getting away from the Braille methodology make this category(L.V)of children psychologically get motivated to study as well as socialisation along with their normal counterparts. So this educational service to the children with low vision by the special educators is inevitable, valuable and highly needful.
9. REFERENCE


