

Trade training for Special Needs Students

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Misconceptions

The visually impaired are sick people.
Reading Braille with eyes eventually leads to blindness.
Sighted teachers for the visually impaired will sooner or later become blind.
The visually impaired persons are dependants, beggars.
Loss of vision leads to other senses being fully developed.
Reading in bright light may lead to blindness.
The only profession for the visually impaired is teaching.
Sighted people cannot be led into matrimony by the visually impaired.

Challenges

Their major challenges were on:

- The infrastructure
- The curriculum

Guidelines for identifying visually impaired students

- Red eyes
- Complains of headache or painful or rubbing eyes
- Frequent mistakes when copying from the chalkboard, text or workbook
- Discomfort in bright light
- Handwriting off the lines or difficult to read
- Skipping of words, letters or lines when reading
- Holding reading material at unusual angle or distance
- Blurred or double vision
- Poor eye- hand coordination
- Thrusting head forward or squinting when looking at close or distant objects
- Bumping into objects even when there is enough light
- Confusing letters or words that look somewhat alike

Problems with reading long passages or failing to complete other school tasks, which require excessive use of vision

Getting confused with details on maps, diagrams

Tilting the head towards one side

Blinking excessively

Moving the head rather than the eyes when reading

Unusual fatigue after completing a visual task

When the eyes do not appear straight especially when the student is tired.

Problems in distinguishing pictures in books, which the rest of the class can manage

Fears of heights and poor balance

Spacing letters and words unevenly

Clouding of pupils or pupillary opening

Categories of visual impairment

Total blindness; uses Braille as a medium of communication

Low vision; uses Braille

Low vision; uses print

Assessment procedures on:

- o Courses applied for
- o Individual special needs

Guidance and counseling on:

Choice within the curriculum, for instance a student who may want to join journalism; what school subjects will be required. What is his/her record?

Entry requirements, for example, grades and at what level?

Orientation and Mobility

Once the college has received new beginners, there is need to provide Orientation and Mobility so that the students can become familiar with the environment. The use of a sighted guide is ideal and more applicable. Therefore, sighted students should be sensitized in order to develop good attitudes toward the visually impaired and as a result, can assist them as sighted guides. Navigation maps may also be used as a supplement.

Low Vision Students

-The effects of low vision are not the same for all students. Differences may occur in:

The amount of vision for distant and near objects

The visual fields

The ability to see print or objects which have poor contrast

Colour vision
The effects of light on vision

-Factors that affect how well a student can see and recognize objects or letters include:

Whether objects are familiar or strange
Distance
Size
Detail or simplicity
Amount of light
Contrast against the background
Whether the objects are still or moving
How easy the object is to reach
Time available for viewing

-In a classroom situation

- Let the sit where they may feel comfortable with light and able to see work on the chalkboard but not facing windows
- The direction of artificial light has to be considered. It is better to have light coming from behind and to one side rather than facing it
- Chalkboard work should be clear and large enough
- The chalk used to be of good contrast to the chalkboard, for example, white on black chalkboard
- Due to individual differences on colour vision, each student should be allowed to use writing materials of his/her preference; e.g. blue, green black, felt pens, bold lined exercise books.
- Their exercises, tests and examinations should be enlarged as per individual needs
- Do not hurry them when observing an object.

Albinism

Albinos have pale or white skin and hair and vision is poor

Near vision is usually better than distant vision

They have nystagmus, refractive errors and poor visual acuity

Spectacles usually improve vision but do not give normal vision

They usually prefer dark or tinted spectacles

The skin should be protected from the sun by wearing long sleeved clothes and caps outside classes

A lotion, **zinc emulsifier**, can be used to smoothen the skin

Low vision devices

Can be useful for distance but are sometimes needed for near activities. These can be:

Optical devices that use lenses to magnify near or distant objects e.g. stand/hand held magnifier, telescope, binocular, closed circuit television (CCTV).

Non optical devices and techniques which make objects easier to see e.g. reading stand, felt-tipped pens, lighting, reading slit (reduces glare), large print.

METHODOLOGY

Task analysis, break each activity up in a sequence of small, easily managed steps and teach those; example

Perimeter of a rectangle:

Show all the steps;

L +W +L +W

L +L +W +W

2L +2W

2(L +W)

Use of language: clear and precise instructions are vital;

Use words that are linked to objects or movement, for example, 'Go to the door' instead of saying 'Go to the left'

Do not use sighted directions, like over here, there... Be specific.

Texture, shape, tilt, slope, heat, sound and smell are useful aids to description for a student with no sight.

Low vision students find the above suggestions meaningful in addition to light, colour and contrast meaningful.

The visually impaired miss a lot of non-verbal communication/the use of Para-linguistic features so avoid using them for them.

Do not be afraid to use sighted words, like 'What do you see?'

Co-active teaching: Teach from behind the visually impaired students when demonstrating an activity. This makes it easier to understand and copy a movement or activity.

Multi-sensory approach: for good concept development, encourage the visually impaired students to use the other senses of feel, hear, taste and or smell as well. Give the students ample time to feel something in order to develop concepts.

Questioning technique:

- Question, pause, and name the student. Avoid using disability unfriendly words like "You the blind" instead of calling him/her by name.
- Involve the visually impaired as much as possible. This helps them to very active in class.
- Reward/praise every attempt and make the student feel positive about the task.

Practical lessons:

This is one approach which can make the visually impaired participate to the full;

- Divide the students in groups
- Assign the visually impaired student secretary of a group
- Whatever the findings the group may come up with, should be pronounced loudly and the secretary makes a record.
- During group presentations, the secretary presents the group findings.

NB: Harmful chemicals should not be exposed to the visually impaired students, however, do not overprotect them.

Maps and diagrams:

All chalkboard work in form of maps or diagrams should be given in advance to the specialist teacher.

Subject teachers should discuss all topics in his/her schemes of work which require maps and diagrams with the specialist teacher.

Modifications

Some questions in exercises, tests and examinations need modification in order to suit the visually impaired students, for instance: **Draw and label parts of a flower.**

The question can be modified in the following way:

Name the parts of a flower

The tactile flower can be drawn and the students be asked to name the already labeled parts, X, Y, X etc.

Questions with diagrams in practical papers which require visual observation should be substituted with other questions possibly related to the diagram.

During national/final examinations, the visually impaired candidates need an invigilator who is a specialist.

There is time allowance of twelve minutes in every hour on any paper.

Achievements

- The infrastructure has been modified for easy access by the visually impaired.
- The curriculum was modified to suit special needs students.
- The regular lecturers of Soche Technical College have received some training on how to handle special needs students. They showed a keen interest throughout.

Future plans

- Have all books put into Braille and enlarge print.
- Review its strengths and shortfalls and forge ahead.
- Other technical colleges to start enrolling special needs students
- Regular lecturers from the other technical colleges to be trained also.