

## **Upfront and clear: Strategies for students to understand and explain their vision impairment**

**Gillian Gale**

Education Consultant  
Vision Australia School  
333 Burwood Highway  
Burwood  
Victoria 3125  
**Australia**

61 3 9808 6422

[gilliang@alphalink.com.au](mailto:gilliang@alphalink.com.au)

### **Introduction**

The majority of students with low vision in the State of Victoria in Australia, are integrated into their local neighbourhood schools and will probably be the only student in that school with a vision impairment. These students are likely to have the support of a visiting teacher and a teacher's aide both of whom will advocate for the student's needs. However, it is essential that these students develop a very clear understanding of their vision impairment, the limitations that the impairment can impose on their access to education, and ways in which they themselves can successfully and independently advocate for their special needs.

To assist students to understand their vision impairment and self advocate for their needs, a course titled 'Vision Issues' has been offered as part of the Vision Australia's Support Skills and Residential Programs. These programs cater for integrated students to provide them with supplementary experience in the expanded core curriculum subjects which cannot easily be delivered in regular schools and the opportunity to mix and form friendships with other students who are vision impaired.

Students involved in 'Vision Issues' all have low vision and are between the ages of eight and 16 years. Sessions are either individual or in groups of up to four. There are advantages to having students with the same condition, for example, albinism, in a group together. However, the advantage of having students with diverse conditions together, will mean that they can begin the explanation of their vision impairment to a small and mostly very accepting group as early as possible. The breadth and depth of inquiry into 'Vision Issues' will depend mostly on the age of the students and their

understanding. The course content is modified for students who have an intellectual disability.

Following are seven main areas that can be investigated. It is suggested that the first two areas 'Who looks after your eyes' and 'Vision testing' should always be completed first, and the other areas can be randomly selected depending on the students' age, eye condition, capability, difficulties and interests. There will also be very personal questions that students ask and subjects that come up in the course of discussion that should be aired and addressed as they arise.

## **Areas covered**

### ***1. Professionals in the field of vision impairment***

**Ophthalmologist** – a fully qualified medical doctor who is also a surgeon. He/she can also test people for glasses.

**Optometrist** – a person with a science degree who tests peoples vision and prescribes glasses.

**Orthoptist** – a person with a science degree who looks at the way in which people use their vision. He/she may help the Ophthalmologist to test people for glasses and provide people who have poor vision with exercises to help them use their vision more effectively.

**Optician** – a person who makes glasses.

### ***2. Measurement of Vision***

**Distance** – how far can you see? What is the meaning of the Snellen fraction? Physically pacing out what 6/36 means.

**Near** – what size print do you need? What is regular print? Looking at different sizes of print. The advantages and disadvantages of large print. Using magnifiers and a close circuit television.

**Peripheral** – can you see to the side? Explanation of tunnel vision. What does 20° mean?

**Colour** – do you see colours? What happens when you are unable to see colour?

**Depth** – your eyes need to function together (binocularly) for good depth perception.

Because the students only attend the Programs twice a term it is necessary to continuously revise the information they have learned in both of the above areas. To do this, students are often given a quiz to which they have to write answers or an explanation of some subject. For example, 'How is distance vision measured?' Students are offered the questions in various print sizes (from N16-N48 as appropriate). They can also choose from a selection of writing instruments, for example thick and thin pencils and biros; and various thicknesses and colours of felt pens. Further, students are provided with a selection of paper, for example, plain, large and small black-lined, blue-lined, and green raised-lined, and also the option of using a closed circuit television. Students with lap top computers may use these to record their answers. Much useful discussion can be generated among the students about the way they read and record their work and also the way they manage these special needs in class.

### **3. *How the eye works***

- Model of the eye

Students have the opportunity to examine a model of the eye that they can take to pieces and reassemble. The different parts of the eye and their function are then discussed. Students learn that for vision to function correctly the eye, the optic nerve and the brain must all be working. Discussion focuses on some of the major causes of vision impairment and blindness, for example: nystagmus, cataract, albinism, retinopathy of prematurity, retinitis pigmentosa and cortical vision impairment. Students are encouraged to fully understand which parts of the eye, optic nerve or brain are affected in their own vision impairment.

- Cross section of the eye

Students are given a diagrammatic cross section of the eye with areas marked, and a sheet explaining the function of each part. Discussion focuses particularly on the parts of the eye involved in each student's specific vision impairment and the function of the different parts. The results are related back to the model of the eye. Some of the older students are given a blank diagram and asked to name the parts of the eye from memory.

### **4. *Managing Visual Fatigue***

Visual fatigue appears to affect the majority of students with low vision and some studies have shown that many students experiencing this difficulty are severely disadvantaged by it (Gale, Fitzmaurice, & Higgins, 2002). Visual fatigue is often not recognised or acknowledged as being a significant difficulty.

Issues discussed include:

- identifying what causes each student's visual fatigue and the way in which the fatigue manifests, for example sore eyes, headaches, lack of concentration, etc.

- possible management strategies. For example, taking regular breaks, more time for reading tasks, extra time for tests and exams, using audio books, obtaining information on disk to be read by a screen reader.

### **5. Telling other people about your vision impairment and self advocacy**

This segment focuses on the discussion about the ways that students can manage some of the difficulties they encounter in their classrooms. These include for example:

- What do you tell people about your vision impairment? Your friends, teachers and other adults at school, people in the community?
- What happens if you have difficulties at school? For example, what happens if you:
  - cannot read the work on the board?
  - cannot read the worksheet?
  - need to use your low vision aids?
  - cannot see what a teacher is showing the class?
  - the light is too bright/dim?
  - there is glare on your work/the board/a table/a book/poster etc. which makes it difficult to see?
  - there is poor contrast which makes it difficult to see?
  - you have difficulties on excursions?

### **6. Managing Help**

For some of the older students, the article "19 Ways to Step Back" (Hudson, 1997) can be a very useful catalyst for discussion about the way students can manage integration aide assistance in the classroom. Students are asked to read this article together. This stimulates discussion about the way they feel help is best offered and accessed which in turn usually leads to sharing ideas about opportunities for moves to gradual independence. Students share their experiences and discuss ways in which they can be kindly and politely assertive in gradually refusing help as they develop their independence to become their own advocates.

### **7. Writing a Personal Vision Statement**

This component of the 'Vision Issues' course is the end point of the subject and will vary for different students at different levels, as well as between students with varying abilities. The ultimate aim of this subject is to write a document that the student can give to either a primary class teacher or to coordinators and subject teachers at secondary level. The beginning of the document will state the name and an explanation of the student's vision impairment including the visual acuity and an explanation of what visual limitations this imposes on the students. The document then continues with the student's special needs and the way that these can be addressed. The Vision Statement is a very personal document and the finished product can range from a single sheet profile to a highly sophisticated Power Point presentation.

The presentation will conclude with examples of various Vision Statements.

### **References**

Gale G., Fitzmaurice, K., & Higgins, Y. (2002). Visual fatigue in children with low vision. Paper presented at: *Vision 2002: International Low Vision Conference*, Göteborg, Sweden, 21-25 July.

Hudson, L.J. (1997). *Classroom Collaboration*. Watertown, MA: Perkins School for the Blind.