

The Bulletin

Number 11, 23 July 2018

Inside This Issue

Here's what you'll find:

- **From SVRC:** Dates for your diary, New braille resources, A Doggy Dot Power Day – Dot Power Report, Student News
- **Feature Article:** Educational Issues Regarding Students with Cone and Cone/Rod Dystrophy by Geoff Bowen
- **Technology:** Inclusive education equipment boost for schools
- **PD:** SVRC Low Vision PD Day

Check updated [The Bulletin archive](#) for back issues!

Dates for Your Diary – 2018

Here is a list of our planned PD and other activities:

Term 3

VoiceOver Basics for iPad: online course running on Wednesdays from 2.30 to 3.30pm during August – [register here for VoiceOver Basics](#)

Dot Power: 7 August (for pre-school and Foundation/Prep)

Educational Support for Students who have Low Vision: Tuesday 14 August – [register here for the Low Vision Day](#)

Dot Power: 11 September (new date for Year 1 to 3s)

[**Space Camp:** September-October in USA]

Term 4

Dot Power: 30 October (for pre-school and Foundation/Prep)

Dot Power: 13 November (new date for Year 1 to 3s)

Support Skills Try Day: Friday 16 November

Technology Expo: Tuesday 27 November

Christmas Morning Tea: Wednesday 5 December [no need to register – just come at 11am!]

Programs and registration are available on the [SVRC website](#)! Online payment is also available!

If you can't find the PD you need, please contact Lea Nagel or Marion Blazé to request a session.

Low Vision PD Day (Term 3)

When: 14 August 2018 from 9.00 to 3.30pm (registration from 8.30am)

Where: Statewide Vision Resource Centre 370 Springvale Rd Donvale

Intended audience: Teachers, ES, VTs and others who support students with low vision

Registration essential: [register here for the Low Vision Day](#)

Cost: \$88 (\$44 for family members and VTs)

Equipment Boost for Schools – Now Live!

This week, the [Victorian Government announced](#) its \$12 million Inclusive Education Equipment Boost for Schools initiative. This includes:

- flexible funding of \$5,000 to every Victorian government school
- targeted funding for (non-vision) specialised equipment, by application from schools
- targeted funding to expand SVRC's Blind and Low Vision Technology Library.

This initiative provides unprecedented funding and a great opportunity to access a range of technologies, for students in schools and the teachers who support them. Applications for blind and low vision technology are open for one short window of time and close on **17 August 2018**.

For more information and to download the guidance for schools, go to

<https://www.education.vic.gov.au/school/teachers/learningneeds/Pages/equipmentforschools.aspx>

Resources to help you with Equipment Boost applications

The short timeline for these applications will make for a very busy time for VTs and SVRC staff. As soon as we possibly can, we will be updating and adding to our 'Technology' page on the SVRC website. Please use this resource to assist you with ideas, information about products, and even access to some quotations. Please contact us with questions, not just about the process, but about what equipment will be useful for your students. If you come across items not on our list, please let us know and we can share your ideas.

If you have any questions, feel free to contact Matt Trotter, Transition Manager, Statewide Vision Resource Centre: trotter.matthew.a@edumail.vic.gov.au

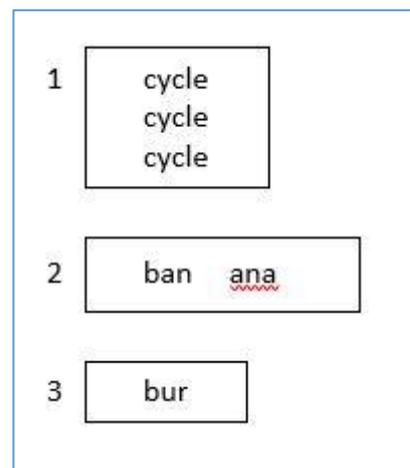
If you'd like any additional support with this program, please email: vision.tech.library@edumail.vic.gov.au.

Ozzie Dots: New Materials in Braille

We have been creating tactile puzzles, mainly for older students, but there are a few that may suit younger readers as well.

Please request any of the following:

- Brain teasers 1: no contractions (see right for examples of Brain teasers 1)
- Brain teasers 2: no contractions in the puzzles themselves; contractions in the solutions
- Brain teasers 3: contractions in the puzzles and the solutions
- Sudoku 1: a simple 4x4 puzzle using the numbers 1, 2, 3 and 4
- Circus Wordsearch (also available in large print)



There are also illustrated alphabet books which have NO contractions to be enjoyed by younger braille readers as sighted children enjoy picture story books.

Please request the following:

- Alphabet abc
- Animal abc
- Fairy abc
- Transport abc

Educational Issues Regarding Students with Cone and Cone/Rod Dystrophy

The following discussion relates to students with cone dystrophy (CD) or cone/rod dystrophy (CRD). Students with CD lose their macular function but retain the use of their peripheral vision. Stargardt's is an example of a CD. Students with CRD present in a similar way initially to students with CD when the condition is in its early stages. In my experience, however, students with CRD tend to lose their macular function earlier than those with CD but this is not always so. Students with CRD go on to lose their peripheral vision as well and can become totally blind. In my experience, the loss of peripheral vision in students with CRD seems to happen during puberty so their vision issues are becoming more extant in late Primary and early Secondary School. As a general principle, we need to start preparing both students with CD and CRD as early as possible with the skills to access and respond to the curriculum that are effective and efficient. In the following, I indicate that these skills, which involve the effective and appropriate use of technology, should ideally be established by the end of Grade 6, as Secondary School makes the development and learning of these skills more difficult. Of course, this will depend on the time frame of the individual's vision loss. Many of the students, however, with CD and CRD have lost a significant amount of their macular function by mid Primary school.

The following are characteristics of students with CD or in the early stages of CRD:

- Significantly reduced distance acuity and usually these students fall into the legally blind range at some stage.
- Reduced near visual acuity.
- Central vision loss (i.e. loss of the cone cells in the macular).
- Difficulty reading small print and a need for considerably enlarged print.
- Need for magnification. The need for unambiguous, high contrast print.
- The need to use assistive technology.
- Preference for lower levels of light. Sensitivity to glare due to photophobia. Often the modern classroom with its whiteboards, large windows and banks of fluorescent lights make a very glary environment. In such classroom environments with high glare and on a bright sunny day in the playground, the student will be able to see very little (they could essentially function as a student with relatively no vision at all). There is a need, therefore, for consistent glare free light at all times.



- Colour vision distortion.
- Reduction of visual stamina and an increase in visual fatigue. Students with very reduced macular function, particularly if they have not developed their orientation mobility skills, are usually exhausted by the early afternoon at school. Reading can also cause considerable fatigue to these students. Even with enlarged print or a magnifier, these students can often only read for up to five to fifteen minutes and then have to stop. The length of reading time will be diminished even further when the student is tired. After reading, the student is often so visually fatigued they cannot attempt reading for quite some time.
- These students often use “eccentric” viewing. “Eccentric” viewing is where individuals with a central vision loss usually look to the side of a person’s face using their peripheral vision (the rod cells of the retina) as they cannot use their central vision to see the persons face. The image they can see is, however, blurred and lacking in detail and colour. This only applies to students with CRD while their peripheral vision is relatively intact.
- Glasses will not correct their low vision and presently there is no treatment for the condition.
- Students with this type of vision loss, who also have difficulties with literacy, have these difficulties compounded by the severe limitation for them to practice and improve their reading due to the visual fatigue they suffer when reading, even for short periods. This limitation in the ability to practice reading also has a negative impact on the student’s spelling development.
- It will not be obvious to others that their vision is significantly impaired. In my experience, students with CD or students in the early stages of CRD desperately try to hide their poor vision. They often do the following:
 - They will avoid using a cane and if their peripheral vision is still relatively OK, they can get away with it. The peers of these students, even when the student is well within the legally blind range, are often completely unaware that these students have a vision impairment. These students often avoid contact with Orientation Mobility instructors, coming to programs like *Support Skills* at the SVRC and they avoid being seen with or having contact with other low vision students.
 - Their ability to hide their disability can be quite “seductive” and it can lead to them avoiding all techniques and approaches that show they are vision impaired. These include using appropriate technology and learning “blind” specific skills or those skills in the Expanded Core Curriculum that are appropriate for them. Even the learning of “touch” typing can be resisted and also changes to accessibility of their computer screen. This is compounded by the fact that Primary School teachers seem unwilling to push all students to develop “touch” typing despite its obvious benefit for all students. The learning of braille is definitely included in this.

- The fact they still have vision and want to use it is also very powerful. I know of a student with CD who continued trying to read even though he could only see one very enlarged letter per page on his laptop. It should be noted that in discussions I have had with adults with CD that were previously students in our schools some have said to me that they regret they did not learn braille as they now believe it would have allowed them to achieve a higher level of education.

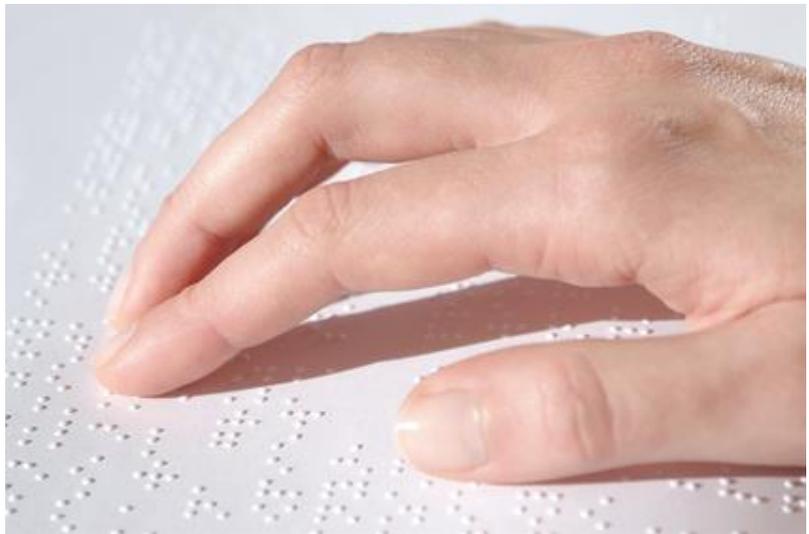
The following are issues of note regarding literacy and Mathematics in students with CD or the early stages of CRD:

- These students usually reach a point where the print size that they need to access is very large (i.e. N36 or N48 or even larger).
- The combination of large print size, glare sensitivity and visual fatigue means that often these students can only sustain reading for very short periods of time and this interferes significantly with their ability to access and respond to the curriculum. Students with learning difficulties/learning disability (dyslexia) often have even greater fatigue while reading.
- These students reach a point at primary school where they are unable to read their own handwriting and thus undertaking their work on a computer is warranted. Learning to “touch” type, therefore, is absolutely essential. In my experience, students often persist or are encouraged to persist with handwriting even though it is no longer practicable.
- In their computer use usually these students during Primary School reach a point where using an enlarged cursor on the computer is either difficult, time consuming or impossible. They often can’t find the cursor and also find the display on the computer too small. Students can use programs like *Zoomtext* to assist in the magnification of what is on the computer screen. Using programs like *Zoomtext* or magnifiers still put a high visual load on students, which can be time consuming, thus reducing efficiency and exacerbating visual and general fatigue.
- These students are very visually orientated or perhaps “dominated” and want to use their vision as much as possible even though using print becomes a very inefficient and progressively inaccessible approach for literacy. In my memory I know of only one student, in Year 7, with a CD accepted learning braille as an alternative to access and respond to the curriculum at school. This young fellow really wanted to keep his Mathematics skills up and he and his parents accepted that learning braille was the only way this could happen (see discussion below for the reasons for this).
- If students learn to be fast “touch” typists and learn to be “fast listeners” they can very effectively and efficiently access and respond to the curriculum in subjects such as English and History. They can, however, only become effective and efficient at this approach if they are independent and accurate in their spelling. This approach is not useful for accessing and responding to Mathematics and in my experience these students find

Mathematics increasingly less accessible and get behind and eventually they usually reach a point where they give it up.

What skill set would be desirable for these students by the end of Grade 6:

- Quick, efficient and accurate “touch” typing of at least 30 or 40 words a minute. This is only useful if the student’s spelling, skills are well developed and accurate as well. It is generally accepted that these students should use a full sized keyboard on their own laptop to access and respond to the curriculum.
- The skilled use of programs like *NVDA* or *JAWS* that allow the student to operate all the functions of a laptop using keystroke combinations and auditory description of what is on the computer screen. To use such programs, the student will have to learn to listen at speed to the output of these programs (perhaps up to 10 times normal speed or more). Fast listening skills, if they occur in our students, seem to happen more by chance than design. If students are using *NVDA* or *JAWS*, they usually “ramp up” their listening speed as part of the process. I have noticed, however, that often the teaching and learning of *NVDA* or *JAWS* seems to be delayed until the student cannot see the cursor on the computer. I would argue that these programs are often taught too late. If a student can “muddle through” with the cursor, then they are encouraged to continue with it. I would advocate the earlier use of *NVDA* and *JAWS* for the following reasons:



- Again, we want these skills nailed down before the end of primary school or as early as possible so students can use them as quickly and efficiently as possible particularly as the volume of work increases. Dr. Karen Wolffe emphasises that we must always be aware of and prepare vision impaired students for the next environment they are in (i.e. what they need at higher levels of school and even post school).
- The use of programs like *NVDA* and *JAWS* encourages the development of “fast listening” which is a key skill in the ability to access and respond to the curriculum particularly as the volume of work at school increases. From my discussions with some adult users of these programs the “standard” voice that they use makes the learning of “fast listening” easier and comprehension more effective as well. I have, however, observed many young, very competent blind students being effective

“fast listeners” in a variety of formats including *NVDA*, *JAWS* or *Siri* on iPad and iPhone. Perhaps the young brain is more flexible!

- I often say to students that every time they use their vision, like searching for a cursor, or trying to find something on their computer screen or trying to read their own handwriting, they are reducing their learning efficiency and also they are causing themselves to become more fatigued. I believe that it is in the best interest of students with CD or CRD to do as much of their work at school as possible without using their vision to increase their efficiency and reduce their fatigue.
- If the student with CD or CRD is to continue with the development of their Mathematics skills it is absolutely apparent to me that they will need to learn braille. If a student cannot read their own handwriting and they have difficulty accessing print sustainably a “visual” approach to Mathematics is practically impossible. It should be noted that Mathematics cannot be accessed like print using E text and a screen reader. The only other alternative, other than braille, is to have an aide sit beside the student in Mathematics, read them the questions and write down the answers. This approach is not sustainable over the long term at Secondary School and is very “expensive” on a student’s allocated aide time. In my long experience of working with students with CD or CRD, the teaching of braille is often not considered or delayed. If it is considered or recommended students and their parents often, block the learning of braille. I believe this has considerable and very negative consequences for the student’s education and their employment in the future. We need to find ways to encourage students with CD and CRD to “see” braille in a more positive way and empowering in their education and future. After all braille is literacy and literacy is empowering!
- The following are some suggestions that may help in encouraging students to consider and learn braille:
 - Perhaps some bursaries or funding could be made available to encourage students to learn braille.
 - Getting a group of students with CD or CRD together to do a braille introduction as a group. Each student could see that they are not the only individual with this disability and needs.
 - Getting parents of these students in, discussing braille with them, and encouraging them to learn braille.

I am sure there are many other ideas from our educational community to assist these students, so talk to your child’s Visiting Teacher, staff at the SVRC or professionals at Vision Australia.

Geoff Bowen

Psychologist SVRC

A "Doggy" Dot Power Day on June 19, 2018

From Marion Blazé

Seven young braille-using students had a fun-filled day of braille, music, tactile graphics and DOGS on Tuesday June 19. This was the second Dot Power day for Term 2 and was dedicated to the "older" group of students in years 2 to 4. They were joined on the day by seven parents who had a concurrent program of learning sessions about changes being proposed to Dot Power, braille music and braille music camp, tactile games and recreational activities, and orientation and mobility skills including guide dogs. We were also very pleased to welcome 13 teachers and helpers on the day: VTs and ES staff, including one on her first day of retirement who came in as a volunteer!!

The theme of the day was "Slob the dog". Slob is a character in SVRC's Ozzie Dots series of braille books. Children were introduced to Slob in tactile graphic form and also as a model with moving parts so that they could investigate how one leg can hide behind another in 2D representations. To make it all "real", we also had a visit from Vido, an ambassador dog from Guide Dogs Victoria. Alicia from GDV invited all the children to get close and personal with Vido, or if that was a bit much, a life-size stuffed toy dog! We even sang a song about using canes for mobility and learned about how to play cards with a brailled set of playing cards. All the families left with a package of resources (braille books one of which contained all the children's own published stories and illustrations, "Slob" models and a toy guide dog) and lots of smiles!

The aim of Dot Power is to provide a day of braille **immersion** for students, who are usually the only one in their school learning to read and write with braille. It also provides a unique opportunity for parents to learn and network, and for school personnel to learn how to adapt materials and include braille-reading students in their programs. The children certainly find it a fun-filled day, reading and writing braille alongside children and adults who also read and write braille.

Special thanks to Claire Garrett of Child's Ply who worked with Lea Nagel to create a wonderful wooden Slob with moving parts and to Emma and Lauren who worked at frenzy pace to ensure that each child took home a book that was written and illustrated by the students on the day.

Photos show Amelia writing and illustrating her page of the Slob book.



VoiceOver Basics for iPad Users

SVRC is running a VoiceOver Basics for iPad Users course during August. Each session goes for an hour on Wednesday afternoons, 2:30-3:30. Topics range from learning gestures, surfing the web, writing and editing and more.

It's all free and registrations are open now. Just go to [our VoiceOver Basics for iPad Users webpage](#) for more information and to register.

If it takes off, you never know, we might run more!

Vision Australia Bursary is Now Open

Vision Australia's Further Education Bursary applications are open as of 1 August 2018.

Each year, Vision Australia awards Further Education Bursaries to a select number of students who are blind or have low vision.

The bursaries provide adaptive technology to help the students fully participate and succeed in their chosen studies.

Applications close on October 31st, 2018.

For more information, and application instructions, please visit www.visionaustralia.org/bursary or contact Joy King, Bursary Coordinator, at 03 8378 1220 or Joy.King@visionaustralia.org

New Employment Boot Camp During September School Holidays

Vision Australia, as part of the Building Stronger Futures program, is offering an "Employment Boot Camp" for Victorian individuals who are blind or have low vision aged 15-18. The program involves:

- A three day intensive Pre-employment Program, held at Vision Australia's new Employment hub at 18 Barrett Street, Kensington VIC
- Six months of job seeking assistance
- Eight to ten Problem Solving Therapy sessions

In order to be eligible to apply, individuals must:

- Be available from 24 to 26 September 2018
- Be blind or have low vision, aged between 15-18
- Be computer literate
- Be interested in employment

Travel assistance may be available. Attendees may also attend via VCU at their nearest Vision Australia office, depending on the circumstance.

All applicants must undergo screening before being accepted into the program. This screening can take place over the phone. If you are interested in learning more, or applying, please contact Belinda Wilson, Building Stronger Futures Lead at Vision Australia on 0418 984 017, or Belinda.Wilson@visionaustralia.org

Circus Day – Feedback Sought

Report and photos will appear in the next issue. In the meantime ...

Thank you to all who attended the Circus Oz workshop and performance – we include staff, volunteers, parents, students, siblings and trainers. Please take the opportunity to fill out the survey using the link below. By providing feedback to us you will help us plan and deliver high quality programs in the future. We'd love to hear from parents, students, staff and trainers!

Click here to begin the survey: <https://goo.gl/forms/UUc7bn1mGXNVSh5k2>



Student News

"Luke has a passion for water ski races and he takes to the water as often as he can", says a recent newspaper article by Margot Taylor. "He has a bluetooth system attached to his helmet that allows an observer to guide him. Luke competed in the Southern 80, Mildura 100 and Queen's Birthday Murray Bridge race this year. Luke said he was determined to ski for the Australian disabled Water Ski Team. 'I will motivate myself and practice lots,' he said."

Ed: Go Luke – go out and grab your dream!!!

Finally

Happy term 3 to all!!! And if you or your child/student are doing interesting things, please let us know through The Bulletin

– Deb Lewis (Ed) lewis.debra.d@edumail.vic.gov.au