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# Welcome from the Conference Chair

We are delighted to join our South Australian colleagues in inviting you to the 2020 SPEVI Conference. The conference will bring together researchers, professionals, parents and caregivers from across our region and globally who support children and young people with vision impairment. The Conference theme is “Creating a clear vision for the future”, and there will be opportunities to learn, share and celebrate the diversity of perspectives and approaches to service delivery.

We congratulate members of the South Australia Organising Committee who have done an excellent job: finding great venues, locking in top keynote speakers, and putting together an exciting and informative conference program. We invite you to join or renew your SPEVI membership by the end of May 2019 to receive the reduced conference registration fee for SPEVI members. SPEVI's relevance in these times is reflected in the vision-specific contributions the SPEVI NDIS-VI working group to current discussions on the Australian National Disability Insurance Scheme. SPEVI's publications inform the profession of current research and practice, including the SPEVI “Professional Standards Elaborations for Specialist Teachers (Vision Impairment)”, “Principles and Practice: Guidelines for quality education of learners with vision impairment” and the acclaimed SPEVI Journal which is now an open source publication on the SPEVI website.

SPEVI supports innovative projects and technologies that align with our Vision and Aims, such as the Monash University “Accessible 3D Printed Graphics” research project, and the evidence-based research of SPEVI members. Adelaide is the place to be in January 2020. Enjoy the opportunity to connect with professionals and families, meet with peers and share your own expertise.

We look forward to welcoming you to the SPEVI 2020 Conference!

Phia Damsma, Frances Gentle and Sharon Duncan

# Conference Organising Committee

**South Australian Local Organising Committee**

Jo Minniss

Skye Jones

Christina Abbracciavento

Angela Helps

Mel Holland

Roley Stuart

**Social Committee**

Lea Thorpe

Beata Nalepa

Aasha Shaw

**Volunteers**

Janet Turner

Kathy Riessen

Elise Lehmann

Tom Helps

Ryan Sims

SASVI Student Art Club

Kilparrin and SASVI staff

# Sponsors & Exhibitors

SPEVI Australia gratefully acknowledges the support from the following groups and companies

#### Logo: Government of South Australia, Department for EducationPrincipal Sponsor

The department for Education is committed to giving every child the opportunity to improve their chances for future success by giving them the best start in life, when their young brains are forming.

By working together with parents, carers, health workers, non-government service providers, business, industry, academics, teachers and children themselves, the Department for Education is helping to make sure every child can be their best, right from the start.

#### Logo: Fox Creek Wines, from the soils of McLaren ValeGold Sponsor

Fox Creek Wines has a strong connection with the vision impaired community through sponsorship of charities and personal networks. Their innovative braille and large print labels have set a new standard in the wine industry.

#### Welcome Reception Sponsor Plenary Session Sponsor

#### Logo: South Australian School for Vision ImpairedResource Sponsor

USBs and all presenter gifts handmade by the students at the South Australian School for Vision Impaired.

#### Morning Tea Sponsors

#### Creative Content Sponsor Delegate Sponsor

#### Tote Bag Sponsors



#### Exhibitors

Blind Sports Australia

Royal Society for the Blind

Quantum

Humanware

Vision Australia

Independent Living Centre

# Keynote Speaker Biographies

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#### Mike McLinden (Ph.D, BPhil Special Education, PGCE, MEd Child Development, BSc Psychology)

Mike is Deputy Head of School in the School of Education, University of Birmingham. This role follows two periods of Director of Education in the School and interim Director of Educational Development for the University of Birmingham. With over 25 years' experience of teaching in schools and Higher Education (HE) Mike has extensive experience of curriculum design, delivery and evaluation as a teacher, lecturer, senior manager and a researcher. Mike's research interests include developing and promoting “research-informed” pedagogical practice within HE with a particular focus on student centred approaches (including enquiry-based learning). With colleagues in the university he has led a number of funded projects that link to strategic developments within the institution and HE sector. Mike's other professional role is concerned with the inclusion of children and young people with special educational needs and disabilities. He is co-director or the Vision Impairment Centre for Teaching and Research (VICTAR) in the Department of Disability Inclusion and Special Needs (DISN) at the University of Birmingham and programme lead for the professional development courses in vision impairment. Mike is involved in a wide range of research and knowledge exchange activities within and beyond the academic sphere (e.g. policy makers and practitioners in the field).

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#### Graeme Douglas (Ph.D, BSc. Hons)

Graeme is Professor of Disability and Special Educational Needs in the School of Education, University of Birmingham. He is the head of the Disability Inclusion and Special Needs (DISN) department. DISN is the largest department of its kind in the UK and comprises over 25 academics researching and studying in the field of inclusion, SEN and disability. He is also the co-director of the Vision Impairment Centre for Teaching and Research (VICTAR).Graeme joined the School of Education, University of Birmingham, as a researcher in 1993 having completed his PhD in the area of individual differences in learning and computer-based presentation (also at Birmingham). Prior to this, he completed a degree in human psychology and computer science at Aston University. Graeme has been the principal investigator and manager on many high-profile externally funded research projects in the area of vision impairment and SEN. He teaches research methods and supervises research students.

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**Emily White (PhD, Education. Master, Special Education (Vision Impairment). Master, Teaching, B.Sc., Health & Physical Education)**

Emily is a research fellow and lecturer at the Melbourne Graduate School of Education, and a teacher practitioner with over fifteen years' experience in disability-specific and inclusive education. Her research interests include accessible and valid assessment for students with disability, digital literacy, and understanding and supporting the learning of students with vision impairment using teacher expertise and evidence. She is currently working on an Australian Research Council Discovery Grant project exploring self-regulated learning in STEM classes. Emily lectures on using data to inform teaching for students with disability, and supporting access to learning via technology. Her PhD study investigated the development and validation of measures for assessing and teaching digital literacy for students with disability. Her assessment tool, derived learning progression, and teaching strategies are now used in over 400 schools in Australia and abroad. At the Statewide Vision Resource Centre, she teaches and provides professional learning, having previously served in curriculum coordination, specialist, itinerant, and classroom roles across a range of settings.

# Program at a Glance

## MONDAY 13TH JANUARY 2020

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 8:00 am | Registration and Networking. Tea and Coffee on arrival. | | | | |
| 8:45-9:10 | Welcome to Country, Official Opening, Ian May, Director Disability Policy and Programs,  Welcome Address (SPEVI Presidents and LOC), Principal Sponsor acknowledgement (Department for Education) | | | | |
| 9:15-10:30 | **Keynote:** **Mike McLinden and Graeme Douglas:** Vision Impairment Education: Examining what “matters” and what “works” in our field | | | | |
| **10:30-11:00** | **Morning Tea** | | | | |
|  | **Room 1** | **Room 2** | **Room 3** | **Room 4** | **Offsite** |
| 11:00-11:30 | **Dr Jane Brown**  Sharpening the focus on “specialist” teachers: A clear vision focused on post-school outcomes | **Lea Nagel**  Dot Power: A braille immersion program for 4-8 year olds | **Justine Smith**  The Australian-New Zealand Ophthalmologist's Perspective on Treating Uveitis in Children |  |  |
| 11:35-12:05 | **Belinda Deramore Denver**  Introducing the Measure of Early Vision Use (MEVU) for children with cerebral palsy | **Meredith Pitcher**  Reading Pictures—Amiria's journey to tactile learning | **Emily White**  Making informed decisions for planning and teaching digital literacy capability for students with multiple disabilities and vision impairment: Investigating the validity of the new digital literacy learning progression | **Leanne Thorpe and Kirby Morris**  Creating and maintaining strong connections: What is the reality for families? |
| 12:10-12:40 | **Lynne Loh**  Functional vision assessments: proving clarity for teachers and educators | **Ana Radis, Harzita Hashim and Sonali Marathe**  Promoting Early Literacy—Little Readers Program | **Sharon Duncan**  “BELS”—BLENNZ Early Learning Services | **Molly Moloney and Grace Kircher**  Association between fussy eating and vision impairment in children and practical strategies for overcoming mealtime challenges |
| **12:40-1:25** | **Lunch—Poster Presentations** | | | | |
| 1:30-2:00 | **Lea Nagel**  Support Skills: A Program for students with vision impairments from years 4 to 10 | **Wendy Voorn**  Database for 3D printed educational materials | **Tricia d'Apice**  Summary of results from “The study of braille reading fluency from students around Australia and New Zealand”. Included is an outline of resources created as result of the study | **Emily White**  Targeted digital literacy teaching strategies for students with multiple disabilities and vision impairment (MDVI): Combining teacher expertise with research-based evidence |  |
| 2:05-2:35 | **WORKSHOP**  **Skye Jones and Lara Torr**  An Accessible Museum: A collaborative project between SA School for Vision Impaired and the SA Museum | **Mandy Lau**  Reach and Match Inclusive Learning Program—Creative Collaboration & Endorsement by Australian Govt DFAT | **Cathy Roche-Wells**  Kilparrin Teaching and Assessment School and Services—Centre of Excellence | **Tanja Stevns and Lars Ballieu Christensen**  SensusAccess—promoting accessibility, independence and inclusion for print impaired students |
| 2:40-3:10 | **Adrian Riessen and Hannah O'Brien**  When graphic design comes to life: 3D models designed and created by students with vision impairment | **Trish Bishop**  Tactile graphics to support emergent literacy the BLENNZ way | **Kaitlyn Hawking**  The “Ireland” of Sodor: The journey of one non-verbal student with autism and an intellectual disability from emergent to conventional literacy learner post complete vision loss |
| **3:10-3:30** | **Afternoon Tea (Support to move to Art Gallery for presentation)** | | | | |
| 3:30-4:30 | **KEYNOTE WORKSHOP** **(Rooms 1&2)**  **Mike Mc Linden and Graeme Douglas**  Learning Through Touch: Supporting learners with multiple disabilities and vision impairment | | **PRESENTATION**  **Christina Abbracciavento and Rachel Elliot**  Cortical Vision Impairment (CVI)—An Overview and General Strategies for the Classroom | **WORKSHOP**  **Hattie Douglass**  Braille Mathematics Workshop | **WORKSHOP**  Art Gallery (Offsite)  **Ryan Sims and Lily Gower**  Navigating the visual—discovering the past, sensing the present and making a creative future. |
| 4:30-5:30 | SPEVI Annual General Meeting (AGM) | | Wombat zone: Parent meet and greet |  |  |

## TUESDAY 14TH JANUARY 2020

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| 8:30 am | Registration for day delegates and networking. Tea and Coffee on arrival. | | | | |
| 9:00-9:15 | Housekeeping | | | | |
| 9:15-10:30 | **Keynote:** **Emily White:** A clear vision for understanding and mapping braille literacy learning | | | | |
| **10:30-11:00** | **Morning tea** | | | | |
|  | **Room 1** | **Room 2** | **Room 3** | **Room 4** | **Offsite** |
| 11:00-11:30 | **Bronwen Scott and Heidi Zec**  CVI Community Australia: Building Meaningful Connections | **Vanessa Vlajkovic**  When Braille Becomes Life: My Journey Through Education and Recreation as Someone Who Uses Braille | **WORKSHOP**  **11 -12:05**  **Phia Damsma**  Accessible Teaching of Digital skills, for Today and the Future | **WORKSHOP**  **11 - 12:05**  **Mandy Lau**  Reach and Match Inclusive Workshop Designed for Children with All Abilities | **WORKSHOP**  **11-12:05**  **Lily Gower and Ryan Sims—Offsite (Art Gallery)**  Now you see me…now I see myself. A sequential guide to teaching portraiture to blind and vision impaired students  \*Delegates to return to Pullman Adelaide |
| 11:35-12:05 | **Jessye Campbell**  A clear vision for expanding a students' world |  |
| 12:10-12:40 | **Kerri Weaver and Laura Garcia**  Eva's Story: Adventures in CVI and Neuroplasticity | **Lara Anderson**  Early Learning Group Experiences for Families of Children with Vision Loss | **Dr Frances Gentle**  Global priorities in education for children with vision impairment | **Melissa Holland**  Walking through walls: the importance of failure in Orientation and Mobility and how we can facilitate successful learning |
| **12:40-1:25** | **Lunch** | | | | |
| 1:30-2:00 | **PANEL**  **Facilitator: Aasha Shaw**  **Rooms 1&2 1:30-2:35**  Peer Panel: Our World Changers: Past, Present and the Future | | **Barbara Farouk and Vilisi Salafabisi**  Fiji Society for the Blind: Creating a clear vision for the future | **Sandy Joint:**  Public and commercial Braille: Bring on “Braille” for a clearer future view |  |
| 2:05-2:35 | **Christina Christensen**  Technology and Braille Music transcription. What are the possibilities? | **Claire Garrett**  Incorporating Versatility in the Design of Tactile Teaching Aids for Blind and Visually Impaired Students: A Case Study |
| 2:40-3:10 | **Melissa Fanshawe, Polly Goodwin and Natalie Kaine**  Implementation of the expanded core curriculum; the process of accrediting standardised national curriculum to provide equitable access to schooling for students who are blind | |  | **Nihal Iscel**  Disability rights and advocacy in Australia and Turkey: sharing information |
| **3:10-3:40** | **Afternoon Tea** | | | | |
| 3:30-4:30 | **FORUM**  **Facilitator: Melissa Fanshawe:**  **Forum:** Implementation of the expanded core curriculum; the process of accrediting standardised national curriculum to provide equitable access to schooling for students who are blind  A continuation from previous session | | **WORKSHOP**  **Raija Linckers**  Using everyday materials to create tactile resources for the very young child with a significant vision loss | **WORKSHOP**  **Michael Evans**  Innovative technology to support, motivate and engage clients with their O&M |  |
| 4:30-5:30 | **Note: Early finish unless involved in Leaders in Vision Impairment (LIVES)** | | | **LIVES** (Leaders in Vision Impairment) meeting—leaders and representatives of organisations supporting children and adults with vision impairment |
| **6.30-10:30 pm** | **Gala dinner**  Pullman Adelaide 6:30 for 7pm start  Theme: “Bright Futures”  Dress Code: Semi formal  Live entertainment provided by Circa 74 | | | | |

## WEDNESDAY 15TH JANUARY 2020

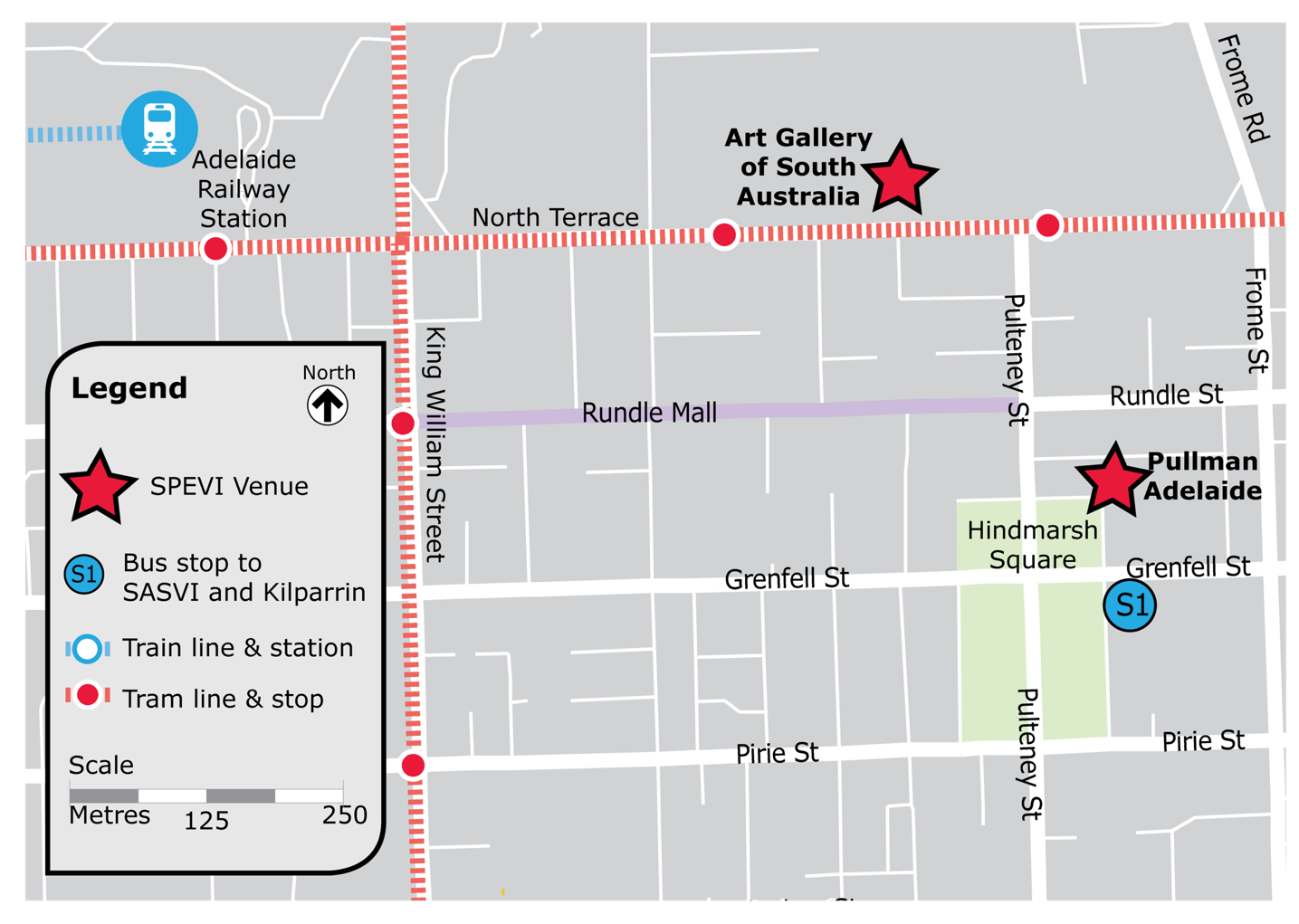
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| 8:30 am | Registration for day delegates and networking. Tea and Coffee on arrival. | | | |
| 9:00-9:15 | Housekeeping | | | |
| 9:15-10:30 | **Keynote:** **Graeme Douglas and Mike McLinden** Vision Impairment Education: What should we do as a field? Creating a clear vision of the role of the specialist educator in a complex and changing world | | | |
| **10:30-11:00** | **Morning tea** | | | |
|  | **Room 1** | **Room 2** | **Room 3** | **Room 4** |
| 11:00-11:30 | **Lars Ballieu Christensen and Tanja Stevns**  A digital library for alternate formats shared by educational settings—How to improve accessibility, higher efficiency and better practice | **Wendy Voorn**  Accessibl**e** computational thinking curriculum | **Frances Mary D'Andrea**  Introduction: Reading Adventure Time! | **Lil Deverell and Michael Evans**  Measuring vision, orientation and mobility using the VROOM and OMO tools |
| 11:35-12:05 | **Irene McMinn**  Pathway to Independence for Deafblind People | **Jarek Beksa and Phia Damsma**  Hey Alexa, what can I learn at home? Accessible use of smart speakers for education of children who are blind or have low vision | **Kerri Weaver**  Private Practice—into the future | **Lil Deverell and Michael Evans**  Learning to measure vision, orientation and mobility in the wild using the VROOM and OMO tools |
| 12:10-12:40 | **Lynne Loh**  Amblyopia and patching | **Deborah Green and Aimee Peterken**  Te Roopu Whakahirahira—a fresh approach to preparing students for life beyond school | **Leona Holloway, Matthew Butler and Kim Marriott**  3D printing for touch readers—A format for the future? | **Christina Abbracciavento**  Cortical Vision Impairment (CVI)—Adapted materials for students |
| **12:40-1:25** | **Lunch** | | | |
| 1:30-2:00 | **Melissa Cain and Melissa Fanshawe (Rooms 1&2)**  What's working in schools today: Perspectives and advice from students with a vision impairment, their parents and teachers | | **Mel Stephens and Lil Deverell**  Coming of age in Oakleigh: Mel's story | **Danielle Kruger**  Transition to a new school: The use of 3D maps to consolidate the learning and understanding of a new environment |
| 2:05-3:10 | **KEYNOTE WORKSHOP** **(Rooms 1&2)**  **Graeme Douglas and Mike McLinden**  Transition into adulthood | | **WORKSHOP**  **Ross Sims and Tristan Fergusson**  Assistive Technology in the classroom | **WORKSHOP**  **Kaitlyn Hawking**  The 5 Rs: The application of Self-Regulation as the foundation of school engagement post complete |
| **3:10-3:40** | **Afternoon Tea** | | | |
| 3:30-4:30 | **WORKSHOP**  **Leona Holloway, Matthew Butler, Kim Marriott and Debra Lewis**  Hands on 3D printed learning tools for tactile literacy | | **WORKSHOP**  **Clare O'Sullivan**  When too much talking is too much talking | **WORKSHOP**  **Charlie Roberts**  Accessible calculators |
| 4:30-5:00 pm | Conference Wrap up | | | |

## THURSDAY 16TH JANUARY 2020

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| 8.30 am | SASVI and Kilparrin tour |

# Conference Program in detail

## Map of Adelaide showing Conference Venues



## SUNDAY 12TH JANUARY 2020

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| 1.00-5.00pm | **Opening Event at the Art Gallery of South Australia**  **Address:** North Terrace, Adelaide  Tours provided by Ryan Sims. Meet at main entrance 10-15mins prior to tour start time.   * 1pm Accessible, Audio Described, Multi-Sensory Tour * 3pm General tour   Note: registrations will not occur at this event but will occur on Monday 8am. |
| 5.00-7.00pm | Welcome Speeches  Drinks and nibbles  Entertainment provided by Tom Helps (violinist) |

## MONDAY 13TH JANUARY 2020

|  |  |
| --- | --- |
| 8.00 am | **Registration and Networking:** Tea and coffee on arrival |
| 8.45-9.10 | **Official Opening:**  Welcome to Country  Official Opening, Ian May, Director Disability Policy and Programs  Welcome Address (SPEVI Presidents and LOC)  Principal Sponsor acknowledgement (Department for Education) |
| 9.15-10.30 | KEYNOTE **Mike McLinden and Graeme Douglas:** Vision Impairment Education: Examining what “matters” and what “works” in our field |

### 10.30-11.00 am — Morning Tea

### 11.00-11.30

|  |  |
| --- | --- |
| Room 1  11:00 | **Dr Jane Brown:** Sharpening the focus on “specialist” teachers: A clear vision focused on post-school outcomes  The nature of inclusion has brought about changes in the daily roles of Specialist Teachers in the field of vision impairment (Brown & Beamish, 2012). Educators (classroom and special education teachers) continue to work with a diverse range of students with disabilities in their local, mainstream schools. Teachers, in particular, are required to have up-to-date knowledge and about a range of students with disabilities, their functional impacts, and capacity to implement reasonable adjustments that provide opportunities for students to demonstrate knowledge and understanding. To meet this need, tertiary qualifications, especially at the undergraduate level, now appear to offer more “generalist” degrees with limited options to access highly specialised training in low incidence areas.  The increased complexities in meeting the needs of high incidence disabilities have made it increasingly challenging for Specialist Teachers in Vision Impairment to cater adequately for the complex and unique needs of students who are blind or have low vision (Brown & Beamish, 2012). This presentation aims to share lived, practical suggestions about how to “maintain the specialisation” of vision impairment within a regular high school. Considerations such as timetabling decisions, Expanded Core Curriculum programming, staff training, and targeted resourcing to maximise the post-school outcomes of young people with vision impairment will be discussed. |
| Room 2  11:00 | **Lea Nagel:** Dot Power: A braille immersion program for 4-8 year olds  Dot Power Program is held at SVRC. The program is aimed at children in pre-school to grade 3, who will be using braille. Children come to SVRC once per term for a fun-filled day of braille, music and organised mayhem. Dot Power functions as a multi-layered workshop, catering to the children, their families and school staff.  Dot Power aims:   * To give children a positive and successful experience of braille * To enable children to work alongside other children who use braille * To give families an understanding of educational possibilities and opportunities * To demonstrate to school staff how to present curriculum to children who use braille   Braille reading and writing are the main focus for the day, alongside all areas of the Expanded Core Curriculum. Concept development, tactual graphicacy, careers, braille music, musical instrument discovery, Paralympics, Orientation and Mobility, Echolocation, cooking and organisation are some of the areas of focus.  Music is used extensively to engage the children with the stories and materials that they read. |
| Room 3  11:00 | **Justine Smith:** The Australian-New Zealand Ophthalmologist's Perspective on Treating Uveitis in Children |

### 11.35-12.05

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| --- | --- |
| Room 1  11:35 | **Belinda Deramore Denver:** Introducing the Measure of Early Vision Use (MEVU) for children with cerebral palsy  Introduction/Objective: Traditional vision assessments have limitations in how much results provide information on how children function in everyday life. An alternative is direct assessment of functioning in everyday activities, but this is complicated by multiple variables impacting a child's performance including vision, cognition, motor functions and aspects of the environment. This is particularly true in young children or those with a disability such as cerebral palsy (CP). We sought to develop a descriptive assessment of “how vision is used” by quantifying parent observations of visual behaviours in everyday activities.  Methods: This mixed-methods instrument development project involved three stages: i) Conceptualisation; ii) Development; and iii) Psychometric Evaluation.  Key findings: 130 parents of children with CP, 8 adults with CP, and 108 professionals participated in an online content validation study that resulted in the “Measure of Early Vision Use” (MEVU). MEVU was pilot tested and revised based on cognitive interviews (n=9). The resultant instrument is a 14-item parent-report questionnaire describing a child's ability to use vision. Each item is an observable visual behaviour, scored on a 4-point ordinal scale. MEVU was found to be relevant, comprehensive and comprehensible to parents of children with CP. Preliminary psychometric data from field testing (n=71) demonstrates adequate structural validity of a unidimensional scale with good internal consistency (α=0.94).  Conclusions: MEVU provides information at an “Activity-level” that may complement existing methods of assessing visual functions. Ongoing validation of MEVU is underway. This tool may also prove useful for wider clinical populations and to guide development and evaluation of interventions. |
| Room 2  11:35 | **Meredith Pitcher:** Reading Pictures—Amiria's journey to tactile learning  To share the journey of an early childhood learner with severe low vision as they work through the stages leading to the accurate interpretation of tactile graphics.  Method: The learner's pathway acknowledges and extends her experiences of life and her love of language and song; using it to give purpose and meaning to the development of tactile skills.  The BLENNZ Tactile Graphics Pedagogy informed the process; building abilities through following the identified hierarchy of skills in order to read tactile graphics. The provision of real experiences and models is used to support the meaningful interpretation of “pictures” and is the basis of the teaching programme.  The findings: A structured approach and meaningful experiences are the key to the development of tactile skills, leading to successful interpretation of pictures, preparing our learners for the graphics that they will be presented in a school environment. |
| Room 3  11:35 | **Emily White:** Making informed decisions for planning and teaching digital literacy capability for students with multiple disabilities and vision impairment: Investigating the validity of the new digital literacy learning progression  Objective: Students with multiple disabilities and vision impairment (MDVI) face substantial barriers to learning due to the “complex, interactional and multiplicative” (Bruce, 2011, p. 291) effect of their disabilities. Yet digital technology use may be transformative for students with MDVI by enabling them to realise their right to access learning (UN, 2006). To better understand how students with MDVI learn to use technology, and use it to learn, in order to support teachers to scaffold the digital literacy learning of these students, this study investigated whether the digital literacy learning progression described by White (2019) for students whose primary disability was intellectual/developmental was suitable for students with MDVI.  Methods:Differential item functioning (DIF) and differential step functioning (DSF) analyses were applied, following advice from Wolfe and Smith (2007), to investigate the items and item-steps used to collect data from 1,413 Australian students with disability for the purpose of deriving a digital literacy learning progression. These analyses served to determine the degree to which items and item-steps maintained their meaning and interpretability for students grouped by disability.  Key Findings:None of the items exhibited significant DIF for any group. DSF analysis results found no evidence of DSF for any item-step for students with MDVI.  Conclusions:The lack of significant DIF for any items, and the minor instance of DSF for one item-step for one group, negated the purpose of running separate calibrations for students with particular disabilities. Arguments can be thus made for the validity of the derived learning progression for use with students with a range of disabilities, including MDVI. Teachers can be confident that the learning progression accurately describes the current and likely next digital literacy abilities of students with MDVI, and to use it to make evidence-based teaching and planning decisions to support targeted, individualised learning. |
| Room 4  11:35 | **Leanne Thorpe and Kirby Morris:** Creating and maintaining strong connections: What is the reality for families?  A case study: Creating and maintaining strong connections from 2013 to 2019, a Kilparrin teacher and family perspective of early intervention and ongoing support to the present time. What is the reality for families? This presentation was first presented at SPEVI in New Zealand, now with distance travelled the student in the initial presentation has now moved from a country preschool/school and is completing his schooling at Kilparrin School in Adelaide. The current teacher and mother will also provide an insight into this journey.  The presentation will discuss the importance of early intervention and collaboration with all service providers and especially the family. The presentation will provide an insight from the educator's perspective and most importantly the family. What worked, what was problematic, what did we learn? The presentation will discuss current research in building strong connections with families. It will provide an overview of Curriculum and the importance of the Expanded Core Curriculum in development and learning. |

### 12.10-12.40

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| Room 1  12:10 | **Lynne Loh:** Functional vision assessments: proving clarity for teachers and educators  Education determines more than a child's economic future—it is also critical to a child's social and emotional development, to establishing a sense of identity and a sense of place in the world. (Commonwealth of Australia, 2009, p. 6). In South Australia over 230 vision impaired children, with ages ranging from 3-18 are supported through the education departments statewide support system. To qualify for statewide support within any school, visual acuity must be less than 6/18 or severely restricted visual fields. Visual acuity, although still widely used as an outcome measure by doctors and support organisations, is a notoriously inaccurate measure and often not representative of vision function. Paediatric vision impairment can have a significant effect on quality of life, with schooling issues ranking high for both children and their parents1. Vision impairment can have a significant impact on a child accessing the curriculum within schools and support within this environment is determined on their recorded visual acuity2. A comprehensive functional vision assessment of these children provides a much clearer picture to educators and parents. Adequate support and targeted interventions can be applied to assist the child with specific areas of visual deficits. Early intervention is crucial to optimise the development of children and young adults, both academically and socially3. A specifically tailored vision framework to support a child's development, can provide them with enhanced skills through their education years and consequently results in them being better equipped to enter the workforce This lecture will discuss the reasons and methods for performing functional vision tests. The most common outcomes/obstacles faced as a result of their vision impairment and the interventions required to support a child through education.  1 Decarlo DK1, McGwin G Jr, Bixler ML, Wallander J, Owsley C. Optom Vis Sci. 2012 Sep;89 (9):1409-16. Impact of paediatric vision impairment on daily life: results of focus groups.  2 https://www.education.sa.gov.au/sites/default/files/school\_res\_notes\_2019.pdf  3 Dale N1, Salt A. Child Care Health Dev. 2007 Nov;33(6):684-90. Early support developmental journal for children with visual impairment: the case for a new developmental framework for early intervention. |
| Room 2  12:10 | **Ana Radis, Harzita Hashim** **and** **Sonali Marathe:** Promoting Early Literacy—Little Readers Program  Studies have shown that being read to as a child and having access to books are the two most important indicators of future academic success.  There is an unmet need for appropriate books for the 0-5 year age group to meet the needs of children with vision impairment and blindness. These children require specialist support of organisations like RIDBC to bring together a team of specialists in the areas of early childhood development, vision impairment and blindness, transcription of alternative formats (braille, large print, eBooks including ePub3) and 3D printing to foster the love of books and reading.  Using the principles of universal design, consultation with early childhood specialists—to gather information about early pre- literacy development; occupational therapists to understand fine motor and tactile skill development, specialist teachers of vision impairment to understand pre-braille skill development, to create age appropriate books to meet the specific access needs to engage children from a very early age. This has led to the development of the “Little Readers Program”. |
| Room 3  12:10 | **Sharon Duncan:** “BELS”—BLENNZ Early Learning Services  BLENNZ is committed to providing quality and evidence-based support to infants, toddlers, young children and their families. This presentation will outline our newly developing early childhood services. Called “BELS”, BLENNZ Early Learning Services provides local and distance support to children and families through a variety of service delivery options.  BELS has 4 foundational principles:   * Early involvement * Bioecological model * Whānau (family) centred practice * Early learning specialised knowledge and expertise   BELS supports RTVs (Resource Teachers Vision) in their work with early childhood aged children and their families through the provision of:   * Distance support for families and RTVs of prioritised children * Early childhood immersion courses, with proposed integration of assessment * Professional learning and development for RTVs and related organisations * Online resources * A centre showcasing early learning resources and activities   BELS aims to support BLENNZ staff and associated organisations to enrich possibilities for infants, toddlers, young children and families. Our vision for the future is to provide comprehensive, coordinated and equitable services, driven by empathically guided relationships. |
| Room 4  12:10 | **Molly Moloney and Grace Kircher:** Association between fussy eating and vision impairment in children and practical strategies for overcoming mealtime challenges  Objective: To discuss the association between fussy eating, delayed feeding skills and vision impairment in children with low vision and to provide early stage strategies on how to support this population.  Methods: Through clinical assessments and intervention programs, we identified key strategies to assist children with low vision to increase their food repertoires, oro-motor skills and self-feeding. To identify the prevalence of fussy eating in children with vision impairments, we have conducted a literature search.  Key findings: Eating is only instinctual in the first few weeks of life, after this it is a learned behaviour, predominately learnt through observing others eat. Low vision increases this challenge and we frequently observe delays with eating skills and difficulty using and exploring with their hands due to tactile hypersensitivities.  A recent study indicating the prevalence of fussy eaters aged between 1 and 5 years old in Australia is 34.1%. There are currently no available studies to indicate the prevalence of fussy eaters with low vision. However, through our clinical practice it is common for clients with low vision to experience fussy-eating, delayed oro-motor and independent feeding skills.  Several studies indicate up to 70% of children with Autism Spectrum Disorder (ASD) are selective eaters and population-based evidence to indicate that ASD is associated with vision impairment in children. Other factors for children with low vision which may impact include, the lack of visual access to social role modelling and the heightened sensory system.  Can:Do 4Kids have developed strategies to support children with low vision to increase their independence with feeding and reduce sensory sensitivities to mealtimes.  Conclusions:Children with low vision benefit from explicit learning opportunities to practice feeding skills. We must provide opportunities to explore foods in a safe environment, with consideration to the child's sensory preferences and oro-motor skill development. |

### 12.40-1.25 — Lunch, Poster Presentations

### 1.30-2.00

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| Room 1  1:30 | **Lea Nagel:** Support Skills: A Program for students with vision impairments from years 4 to 10  Support Skills Program is held at SVRC. The program is for Students in years 4 to 10 who have low vision or who are blind. Children come to SVRC once or twice per term for a 6-part timetabled day of studying areas of the Expanded Core Curriculum. Students or their families school staff can request sessions on specific skills. The Support Skills Program has been running for many years, originating at RVIB School, Burwood.  Support Skills aims:   * To support the inclusion of students with vision impairments in their local schools * To enhance the Expanded Core Curriculum learning supplied by the school and visiting (itinerant) teachers * To enable children to work alongside other children who share similar experiences, developing their support networks * To give families an understanding of educational and life possibilities and opportunities * To demonstrate to school staff how to present curriculum to children who have vision impairments   This paper will describe the Support Skills Program and describe the ways in which the program adds value to the lives of the young people who participate. |
| Room 2  1:30 | **Wendy Voorn:** Database for 3D printed educational materials  For over two years, Royal Dutch Visio has worked on an international project, funded by the European Union, called UBIS (Universal Information Containers for Blind and Visually Impaired Students). With special educational partners from Germany, Vienna, and Luxembourg, we have developed a database and guidelines for educational 3D printed models.  3D printing enables schools to provide students with vision impairment with accessible lesson materials. This technique allows for the creation of products, objects, and models in a cheap and easy way. But where to begin?  Students with vision impairment can benefit from using 3D models to access learning. While 3D materials are often common in specialist education settings, not all of them are fit for the purpose of learning by students with vision impairment. A 3D printer enables adjustments to a model or the creation of a new one. In many cases, however, designing and creating a model takes time and experience. Additionally, most products in regular databases are not suitable for students with vision impairment. The links between the use of the model and teaching and learning are often unclear, as many databases do not include information about pedagogical aspects of model use. The UBIS database seeks to address this situation by allowing schools for students with vision impairment to share their knowledge, information and models.  The guidelines contain information about 3D printing, targeted at teachers and designers. One chapter evaluates the effect of models on the learning process and discusses how 3D model use provides access to learning for students with disability. It contains a decision tree on the suitability of particular media is for a lesson/subject. It emphasises how to design and create models for students with vision impairment and answers frequently asked questions.  Access to this European database and guidelines may benefit Australian students with vision impairment and their teachers. |
| Room 3  1:30 | **Tricia d'Apice:** Summary of results from “The study of braille reading fluency from students around Australia and New Zealand”. Included is an outline of resources created as result of the study  A brief overview of the research study that was carried out in 2017, around Australia and New Zealand. The study had 73 participants whose oral reading fluencies were measured and compared to sighted normative data.  The major outcome of the research was based on anecdotal observations, resulting in an online Braille Package. The package includes booklets to teach the UEB Braille Literary Code, as well as some ideas to help children to overcome Braille reversal problems. |
| Room 4  1:30 | **Emily White:** Targeted digital literacy teaching strategies for students with multiple disabilities and vision impairment (MDVI): Combining teacher expertise with research-based evidence.  Objectives:For students with disability, learning to use digital technology, and using it to learn, can be understood as digital literacy (White, Woods, and Poed, 2017). To support teachers to accurately meet the digital literacy learning needs of their students with MDVI, this study developed targeted teaching strategies and advice for specifically for these students working within the six levels of the empirically validated digital literacy learning progression developed by White (2019). Using a developmental, rather than deficit-based, approach to understanding learning, White's (2019) progression described an expected continuum along which the current points of readiness to learn digital literacy could be identified in students whose primary disability is intellectual. Targeting teaching to a student's individual point of readiness to learn, or zone of proximal development (Vygotsky, 1978) allows for maximal impact in learning (Care & Griffin, 2009).  Methods:An initial list of strategies and advice was curated from empirically based studies in peer-reviewed journals and edited books and modified into statements. These statements were reviewed and refined by teachers with specific subject matter expertise. This list was panelled by a specialist group of experts in vision impairment, d/Deafblindness, and d/Deaf education, who provided feedback on the inclusivity of the strategies and advice for the students within these cohorts, improvements, and additional strategies and advice specific to these students' unique learning needs.  Key findings:The experts offered strong, shared support for the appropriateness of the strategies and advice for students with MDVI, suggesting that nearly all strategies and advice would likely support the learning of these students.  Conclusions:While further validation of the strategies and advice for students with MDVI is required, the endorsement of nearly every strategy by those with specific expertise can offer strong support to all teachers who seek to scaffold the digital literacy learning of their students with MDVI. |

### 2.05-3.10

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| Room 1  2:05 | WORKSHOP **Skye Jones and Lara Torr:** An Accessible Museum: A collaborative project between SA School for Vision Impaired and the SA Museum  A child who is blind can directly experience only what is within arm's reach and can be safely touched, and in most cases, what can be heard … teachers, families and the community work together to bring the world of experiences to the child in a meaningful manner.  Staff from SA School for Vision Impaired worked collaboratively with the SA Museum over a 12-month period to develop learning experiences to engage students in a range of exploratory and interactive learning activities linked to Biological sciences. Using a multisensory approach including the use of real-life objects, models, tactile diagrams, hands-on-activities, audio and digital media allowed students the opportunity to engage with and develop a range of learning styles while gaining greater understanding of the topic. Classroom learning activities are strategically linked to real life experiences and often begin or culminate in excursions.  In this workshop participants will:   * Explore sensory bags as an introduction to the topic and learn about accessible taxonomy * Learn how a traditional museum, with exhibits behind glass, can become accessible and relevant to students with vision impairments through tactile resources and facilitated exploration * Explore tools that can be adapted to explore echolocation * Listen to soundscapes created by students using foley techniques * View footage of students engaged in activities designed to pique their interest in science, leading to thoughtful questioning and deep learning |

### 2.05-2.35

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| Room 2  2:05 | **Mandy Lau:** Reach and Match Inclusive Learning Program—Creative Collaboration & Endorsement by Australian Govt DFAT.  Reach & Match is a holistic learning program that has been designed through focused research and user testing to specifically support children with vision impairment and other disabilities to learn and engage with their peers equally in preschools and primary schools. It provides 7 Learning Outcomes for children to learn through over 40 activities: Braille, Cognitive skills, Sensory Integration, Body Movement, Language Enrichment, Social Interaction and Sense of Satisfaction. Its research was awarded with Monash University Vice-Chancellor's Social Inclusion Award and along with 12 global awards in Education, Inclusion and Assistive Technology.  In 2018-2019, Reach & Match has won an Australian Government DFAT InnovationXchange Award to partner with Save the Children and Plan International to support over 2400 children who suffered emotional and physical trauma with the Reach & Match Inclusive Learning Program. Baseline and end line evaluations were conducted and found improvements in children's participation, learning outcomes, attendance rates and social and emotional wellbeing. Reach & Match received an endorsement from the Australian Government DFAT towards its positive outcomes for children's development. During the presentation, project innovation and outcome, challenges and evaluation will be shared. |
| Room 3  2:05 | **Cathy Roche-Wells:** Kilparrin Teaching and Assessment School and Services—Centre of Excellence  This presentation will introduce the audience to Kilparrin, a Centre of Excellence, a Department for Education service supporting students with sensory impairment (vision and/or hearing) and additional disabilities. Kilparrin provides on-site preschool and school programmes, as well a Statewide Support Service (SSS) providing support to students from birth to end of schooling across South Australia. The presentation will discuss the scope of Kilparrin, including the management of the complexities that exist delivering a Statewide Support Service. The journey of Kilparrin to date will be discussed, and the difficulties in raising the school and service profile.  Kilparrin also encourages all staff to develop their specialist skills, encourages community involvement, including collaboration with other sites and professional to undertake targeted projects, and works alongside other services, including OTs, PTs, SPs and other providers, to best provide support for the Early Intervention clients and families, and school students. |
| Room 4  2:05 | **Tanja Stevns and Lars Ballieu Christensen:** SensusAccess—promoting accessibility, independence and inclusion for print impaired students  Students with print impairments require accessible text in alternate formats such as audio books, e-books and Braille. Therefore, efficient document conversion methods are required if the students with print impairment are to be included on equal terms in the educational system and, subsequently, on the labour market. Traditional alternate media conversion methods are manual, slow, expensive and often rely on help from others. Furthermore, conversion methods frequently necessitate significant technical proficiency.  Consequently, it is costly to have textual material converted into accessible alternate formats and availability is subject to substantial delays.  SensusAccess is a web-based conversion service intended for institutional use for students, faculty and staff who need access to accessible and alternate formats. The session will explore how students themselves can use the SensusAccess service to make inaccessible documents more accessible and convert their PowerPoints, Word files and PDF documents into audio books, digital large-print, e-books and Braille. The session will furthermore discuss how the SensusAccess LTI plug-ins to the main learning management systems can encourage faculty and staff to provide accessible content. A substantial number of academic institutions throughout the USA, the UK, Canada and Australia have adopted the service as a means to promote accessibility, independence and inclusion amongst their print impaired students.  Finally, the session will examine how some of the stigma surrounding use of assistive technology may be prevented by inviting mainstream users—e.g., students with poor language skills, foreign language students, students wishing to explore different learning styles—to exploit the service. |

### 2.40-3.10

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| Room 2  2:40 | **Adrian Riessen** **and** **Hannah O'Brien:** When graphic design comes to life: 3D models designed and created by students with vision impairment  With an increasing educational focus on STEM, educators are set with new challenges to ensure access for students with vision impairment. Of particular complehawkingxity are areas of STEM that are primarily visual including 3D graphic design.  This presentation outlines the experiences of students from the South Australian School for Vision Impaired during their participation in a South Australian Department for Education program promoting 3D printing in primary schools, in conjunction with Makers Empire. It also follows students continued involvement in SASVIs '3D printing club'. Exploring the design thinking process and the promotion of spatial skills and 3 dimensional concepts as students work to improve accessibility for themselves and others with vision impairment. We will also explore the Makers Empire 3D printing software, including the challenges for low vision accessibility and strategies that were used to ensure inclusion and enjoyment for the students involved. |
| Room 3  2:40 | **Trish Bishop:** Tactile graphics to support emergent literacy the BLENNZ way  To share one aspect of how we have implemented our Tactile Graphic program to increase literacy outcomes for learners in New Zealand. The creation of a Tactile Image Library for the illustration of instructional reading books is based on the principles of the BLENNZ Pedagogy of Tactile Graphics.  Method:In the past, production of images for instructional readers was inconsistent, with learners not always receiving relevant and meaningful information from the illustration. The idea of presenting instructional readers with specifically designed images occurred as a result of the work done in previous years in developing our Tactile Graphics Curriculum, which initially focused on Mathematics. The BLENNZ Tactile Graphic Pedagogy forms the foundation of the creation of the tactile images, and the initial purpose of this project was to further develop tactile graphic interpretation skills, by providing graphic images that also promoted early literacy skills.  In 2018, we contracted an Illustrator to create a collection of images to illustrate emergent instructional readers. A group of Resource Teachers Vision and young people around New Zealand participated in this trial. Books were produced in a strictly consistent format and quality at a range of levels. Feedback was obtained from the participants during and following the trial, and alterations made over the period of the trial to improve the format and graphics.  Key finding and conclusions:BLENNZ learners now have access to a learning tool that promotes concept development, incidental learning, facilitates interpretation skills, promotes spatial orientation on a page, improves reading comprehension, and makes reading interactive! One of the spin-offs has been the provision of accessible images for dual learners, who have been presented with images that lack complexity and have excellent contrast. The outcomes exceeded our expectations. |
| Room 4  2:40 | **Kaitlyn Hawking:** The “Ireland” of Sodor: The journey of one non-verbal student with autism and an intellectual disability from emergent to conventional literacy learner post complete vision loss  In South Australia, the government education system has evolved to consider the enrolment in a special options placement based on disability specific characteristics. Certainly, there are schools typically attended by students when vision impairment (with or without additional disabilities) is identified before school enrolment age. What happens when a student enrolled in a more generalist special school setting acquires a vision impairment? In this case study, the impact of transferring enrolment to a specialised site would have been catastrophic.  The cycle of planning, assessing and teaching is unpacked in the context of a non-verbal student with autism and an intellectual disability who experienced complete vision loss after an illness at age 10. Diagnostic, formative and summative assessment tools used to identify his abilities and challenges within authentic assessment environment are shared. These tools are then used to demonstrate his progress over the subsequent 3 years from emergent to conventional literacy learner.  This presentation is focussed on the environmental, instructional and curriculum adjustments made to a special school environment to maximise participation. The initial use of play-based and routine driven learning strategies to foster positive dispositions for learning and planned incidental teaching of Expanded Core Curriculum skills is detailed. This is complemented by thelara exploration of the robust, evidence-based emergent literacy strategies (i.e. oral language development, print awareness and phonological awareness) which has resulted in this student becoming a conventional literacy learner. These adjustments occur within a Self-Reg framework complemented by the implementation of school-wide positive behaviour support strategies.  The outcome of the above strategies has been a student who has been able to remain enrolled in his current special option whilst receiving education tailored to his vision impairment in the context of his pre-existing disabilities. The student is well on the path to developing the independence he values now and into the future. |

### 3.10-3.30 — Afternoon tea

### 3.30-4.30

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| Rooms 1 & 2  3:30 | KEYNOTE WORKSHOP **Mike McLinden and Graeme Douglas:** Learning Through Touch: Supporting learners with multiple disabilities and vision impairment  Learners with multiple disabilities and vision impairment will rely on support from their learning partners throughout their education to mediate their learning experiences. In this workshop we explore the key role that touch plays in the education of these learners and provide practical advice and guidance about how to develop the skills through touch that they will need to become “active agents” in their own development. The workshop reflects international initiatives that seek to ensure that people with disabilities have opportunities to take meaningful control within their learning and their lives. The workshop will be structured through reference to the framework presented in the recently revised version of the text “Learning Through Touch” (McLinden, M.; McCall, S. and Hodges, L. 2020). |
| Room 3  3:30 | PRESENTATION **Christina Abbracciavento and Rachel Elliot:** Cortical Vision Impairment (CVI)—An Overview and General Strategies for the Classroom  Objective: For the audience to have an increased understanding of the complexities of Cortical Vision Impairment, and some strategies to implement to support the development of vision.  Increasing numbers of students with CVI are entering the education system, and it is widely believed that CVI is the single leading cause of vision impairment in developed countries. This session will provide an overview of the ten unique visual and behavioural characteristics of CVI, and general strategies for the classroom to support the student to develop their vision. Examples of adaptations and interventions will be provided; however, each student is unique, and the presenters recommended that individuals have a CVI Range undertaken to guide specialised interventions. |
| Room 4  3:30 | WORKSHOP **Hattie Douglass:** Braille Mathematics Workshop  Get hands-on experience writing mathematics in Unified English Braille code. Practice on both a Perkins brailler (recommended best practice) and a braille device where you will see the visual result of the braille.  This workshop will cover:   * fractions * indices * square roots * signs of operation and comparison * commonly used symbols * when to use grade 1 indicators. * what not to do   A booklet of everything covered will be provided for you to take home.  Please bring a laptop that can open Word files and PDFs.  Assumed knowledge: 6-key entry of letters and numbers in braille. |
| Art Gallery of South Australia  3:30 | Travel to Art Gallery arranged during afternoon tea  WORKSHOP **Ryan Sims and Lily Gower:** Navigating the visual - discovering the past, sensing the present and making a creative future. The Art Gallery of South Australia, providing blind and vision impaired students with multi-sensory opportunities to explore, tell stories and gain skills through the visual arts  Blind and visually impaired young people navigate a visually complex world. Art Gallery of South Australia [AGSA] visits provide SA School for the Vision Impaired [SASVI] students the opportunity to explore the visual in a safe and supportive environment; to learn about cultures often different from their own; to hear (at times confronting) life stories and histories; to gain an understanding of complex concepts and visual phenomenon (transparency, reflection, shadows etc.); and to explore diverse materials and making processes.  In 2017 students were introduced to the Yarrenyty Arltere artists via an audio-described video portrait and a sculpture created for touching, and then stitched their own tactile self-portraits. In 2018, students explored contemporary works of art and then stitched “magical island” maps responding to the work of Roy Ananda and Pip+Pop. Through the medium of stitching students were able to successfully “draw” their portraits/maps with thread, enhanced further through the stitching of additional materials to represent facial/landscape features, transforming the 2D drawing technique into a 3D tactile outcome. Participating in accessible making workshops furthered comprehension of the exhibited works and the artists who made them, and enabled students to share their own personal or imagined stories in a multi-sensory form. Students followed detailed instruction in this creative environment, used materials and techniques new to them, improved hand and finger dexterity, and were able to develop “finger reading and wayfinding” skills through the creative process and then sharing the resulting portraits/maps with their peers. All essential skills applicable to real-life contexts.  For SPEVI 2020, workshop participants will be introduced to the gallery as a valuable learning resource. Participants will respond to works by Aboriginal artists as featured in TARNANTHI and will acquire practical advice on adapting visual art content for blind and vision impaired students. Workshop participants will partake in a multi-sensory experiential “map stitching” workshop and will be provided with take-home accessible learning resources.  NOTE: This workshop will take place at the Art Gallery of South Australia. |

### 4.30-5.30

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| Room 1 | SPEVI Annual General Meeting |
| Room 2 | Wombat Zone: Parent Meet and Greet |

## TUESDAY 14TH JANUARY 2020

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| 8.30 am | **Registration (day delegates) and Networking:** Tea and coffee on arrival |
| 9-9.10 | **Housekeeping** |
| 9.15-10.30 | KEYNOTE **Emily White:** A clear vision for understanding and mapping braille literacy learning |

### 10.30-11.00 am — Morning Tea

### 11.00-12.05

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| Room 3  11:00 | WORKSHOP **Phia Damsma:** Accessible Teaching of Digital skills, for Today and the Future  Early access to technology, computational thinking and coding is important for those students who aim for a future career as computer programmer or app developer. But regardless of whether you will at some point in time actively apply them in the IT field: effective digital skills, the skills to use an iPad, an understanding of how computer technology works, are important for all students in today's “connected” and “smart” world. For many students who are blind or vision impaired, mainstream mobile touch devices will have replaced “blindness specific” equipment. iPads can greatly assist with access to classroom assignments and activities, as well as in a broader sense enabling communication and social interaction with friends, as well as independence through a variety of available apps. But first a student needs to learn how to use this technology, such as with VoiceOver, the built-in screen reader.  Mainstream Learn-to-Code programs generally have very limited levels of accessibility and/or usability for young students who are blind or vision impaired. This can result in students not being able to actively participate in classroom Coding activities with their sighted peers and missing out on opportunities to develop computational thinking and coding skills. These skills ensure students' equity of access to The Australian National School Curriculum's “Learning in Digital Technologies”. Learning Coding logic also positively impacts on a range of other skills, such as general problem solving, independence, mathematics and Orientation & Mobility.  Sonokids Ballyland is an accessible technology learning pathway, with a suite of educational game apps for iPad. Phia will share real case examples of students developing digital skills with the Ballyland apps, which are used around the world. She will demonstrate how the apps support building of essential digital skills, benefitting students' current education, as well as their future. |
| Room 4  11:00 | WORKSHOP **Mandy Lau:** Reach and Match Inclusive Workshop Designed for Children with All Abilities  Reach & Match is a holistic learning program that has been designed through focused research and user testing to specifically support children with vision impairment and other disabilities to learn and engage with their peers equally in preschools and primary schools. It provides 7 Learning Outcomes for children to learn through over 40 activities: Braille, Cognitive skills, Sensory Integration, Body Movement, Language Enrichment, Social Interaction and Sense of Satisfaction. Its research was awarded with Monash University Vice-Chancellor's Social Inclusion Award and along with 12 global awards in Education, Inclusion and Assistive Technology. In 2019, Reach & Match received an endorsement from the Australian Government towards its positive outcomes for children's development.  Reach & Match is a holistic learning program that has been designed through focused research and user testing to specifically support children with vision impairment and other disabilities to learn and engage with their peers equally in preschools and primary schools. It provides 7 Learning Outcomes for children to learn through over 40 activities: Braille, Cognitive skills, Sensory Integration, Body Movement, Language Enrichment, Social Interaction and Sense of Satisfaction. Its research was awarded with Monash University Vice-Chancellor's Social Inclusion Award and along with 12 global awards in Education, Inclusion and Assistive Technology. In 2019, Reach & Match received an endorsement from the Australian Government towards its positive outcomes for children's development. |
| Art Gallery of South Australia  11:00 | Travel to Art Gallery during Morning Tea  WORKSHOP **Ryan Sims and Lily Gower:** Now you see me … now I see myself. A sequential guide to teaching portraiture to blind and vision impaired students  Objective: The objective of this workshop is to introduce the basic principles of how to teach blind children to draw portraiture.  The “visual” arts provide a fantastic opportunity for students to develop their understanding of spatial/relational knowledge and to practice their tactile graphics skills. A necessary skill, not just relevant to the arts, but for interpreting illustrations, tactile graphics and diagrams such as in maths and science, geography, and orientation and mobility. As the music and creative arts teacher at SASVI this poses a question; “how do I make the “visual” arts curriculum accessible to blind and vision impaired students?” Personal research has shown that many blind and vision impaired children are unable to demonstrate spatial/relational awareness when drawing faces. When initially asked to draw a face, many students drew a circle, two dots for eyes and curved line for the mouth, the nose and ears were rarely represented. Sometimes the features of the face were located nowhere near the circle representing the head. Students with low vision were predictably more advanced however still demonstrated deficits in their spatial/relational knowledge. This inspired me to devise a resource to assist blind and vision impaired students to understand how to represent the reality of the human face in pictorial form… “now you see me… now I see myself”.  Workshop will include:   * A short presentation about the 2019 SASVI portrait project and Art Gallery of SA collaboration * Introduction to the basic prerequisite skills required for being able to draw and to interpret the drawings of others * Demonstration of currently available drawing tools and resources for blind artists such as; “Hungry Fingers”, “Come Draw with Me”, and “Art beyond sight” * Participants will attempt to draw/interpret a series of lines and shapes under simulated sensory conditions (blindfold). Participants will be introduced to a range of tactile drawing resources such as raised line drawing kits, wikisticks, thermoform and stereocopy.   Introduction to the newly developed facial drawing resource designed to sequentially teach portraiture. |

### 11.00-11.30

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| Room 1  11:00 | **Bronwen Scott and Heidi Zec:** CVI Community Australia: Building Meaningful Connections  Cortical Vision Impairment (CVI) refers to vision impairment caused by damage or disorder to the visual pathways and visual processing centres of the brain and is now recognised as the leading cause of vision impairment in children in developed countries.  CVI is indicated when all the following characteristics exist:   * an ocular eye exam that is normal or cannot explain the functional vision impairment; * a history of a significant congenital or acquired brain injury or neurological disorder; and * the presence of unique visual characteristics and behaviours associated with CVI (Roman-Lantzy, 2018).   Research has shown that with the appropriate intervention, the functional vision of children with CVI can improve significantly.  The development of the CVI Range Assessment tool (Roman-Lantzy, 2007, 2018) provides a means of understanding how children with CVI see, developing appropriate interventions, and monitoring progress and improvements in functional vision. This presentation will provide a case study example from the perspectives of an O&M specialist and a parent in how the CVI Range assessment tool was used to develop appropriate interventions for a very young child diagnosed with CVI.  In addition, the presenters will introduce “CVI Community Australia”: a new voluntary, web-based forum for Australians to learn more about and connect with others in relation to CVI. While there are communities existing in the UK, USA and Europe, there is currently no community for this purpose in Australia. CVI Community Australia would like to fill this gap in creating a community for parents, professionals and the wider community for the purposes of education, discussion and creating meaningful connections. |
| Room 2  11:00 | **Vanessa Vlajkovic:** When Braille Becomes Life: My Journey Through Education and Recreation as Someone Who Uses Braille  I have been using Braille since I was four years old. I was born blind though I still have twenty percent remaining vision. I am able to read large print but Braille is much faster and causes no eye strain, so it was the best choice for me.  Later, when I was seven, I began to lose my hearing, which is when Braille became even more important in my life, because it was my sole means of communicating with the world around me since I could no longer hear.  I became dependent on my BrailleNote, it was now my best friend and I went nowhere without it.  Unfortunately, over the past eighteen years, I have come to realise that there is very little awareness about Braille in the community, something that has saddened me and made me advocate for change. In 2016 I approached Sizzler, one of my favourite restaurants, and asked them to make their menu accessible to blind and deafblind people. They agreed, and it gave me the push I needed to keep fighting for the same thing in other cafes and eateries.  I also have recently completed my undergraduate degree in journalism, where again Braille played a big role in helping me get through university.  For the purpose of this presentation, if my abstract is accepted, I would talk about the struggles I faced as a deafblind student needing all material in Braille, and the other areas of my life such as sport, friendships, relationships, advocacy and more, in which I use Braille more than someone who is only blind. I hope to engage the audience with my personal experiences and share my challenging but successful journey up to age 22. |

### 11.35-12.05

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| Room 1  11:35 | **Jessye Campbell:** A clear vision for expanding a student's world  To describe my experience of spending a year in France (2018) on Rotary’s International Student Exchange program, including my reasons for wanting to do this, how it was achieved and what the benefits were.   * To encourage teachers and parents to inspire students who are keen to challenge themselves and push the boundaries of what people think is possible for someone with a disability. * To stress the importance of encouraging students to be brave, to believe in themselves, to challenge themselves and to venture out into the world on an established program like an international student exchange program.   Specific steps were taken to prepare for this adventure psychologically, logistically and financially. As the aim was to remove barriers and create solutions, this involved collaborative management, flexible thinking and open-mindedness on all fronts. Just like in teaching, high expectations of such things can achieve high results.  A 12-month cultural exchange away from home and living in a foreign country was a challenge which had many benefits for myself and beyond. I was able to learn a new language, experience different styles of living with 7 different families, travel to many countries and make friends from all around the world. I attended mainstream school and joined in all student programs. Others were able to see a blind person who was capable, confident and contributing. |

### 12.10-12.40

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| Room 1  12:10 | **Kerri Weaver** **and** **Laura Garcia:** Eva's Story: Adventures in CVI and Neuroplasticity  Laura and her family have needed to invite specialists into the home ever since their daughter fell ill as a 1 year old. She is 7 years old now and her journey has been such a positive one despite her initial challenges and low vision. Her empowered parents have been such a strong supporter in rehabilitation and ensuring that Eva can achieve alongside her peers and family, with the realistic expectations of a fulfilling life ahead and learning through dual-media.  Case Study—Acquired loss as a 1 year old   * Introduction to the medical world * Sharing the hospital experience * Sharing the importance of ongoing multidisciplinary team support and follow-up * Diagnosis to Prognosis * Parents' Perspective * Specialists' Perspective * Photographic evidence |
| Room 2  12:10 | **Lara Anderson:** Early Learning Group Experiences for Families of Children with Vision Loss  Objectives of the Presentation:   * Share the findings of a pilot project to develop early learning groups for families with children with vision loss * Facilitate discussion with attendees related to their experiences running similar groups and successful models for maintaining sustainability with current funding from NDIS   Methods: A project was completed in the Melbourne South East Region to develop Early Learning Groups for families with children with vision loss with the support of two Occupational Therapy student from Monash University. The project consisted of a literature review, a pilot group for six sessions at the Amiga Montessori site in Cranbourne West in Melbourne and evaluations with feedback from both parents and staff facilitators.  Key findings: Our literature review highlighted the need for children with and without vision loss to have early positive social experiences with their parents in a group situations. We also know first-hand through our work that parents often share with us the feeling of isolation that can come in the early years when they feel like they are the only one raising a child with vision loss. We have considered running more groups for families to attend for this reason. Our pilot early learning groups presented challenges for both developing regular attendance and maintaining sustainability if we are to rely on NDIS funding for future groups. Through careful consideration of our evaluation of these groups we have discussed improvements to address feasibility of running this as an ongoing group, the preferred format and optimal location. We are also exploring other options that might be available to address the same objectives for these families if the group's format does not support this.  Conclusions: The presentation will present out key findings and provide a forum for service providers to discuss their personal experiences to in working with young children and their families. |
| Room 3  12:10 | **Dr Frances Gentle:** Global priorities in education for children with vision impairment  The acquisition of education, learning and skills was identified in the World Bank's 2018 World Development Report as essential in enriching the lives of individuals by raising aspirations and promoting employment, earnings and health. The International Disability Development Consortium (IDDC) highlighted the positive impact of disability-inclusive education on the social, academic, health and economic outcomes of children with disabilities, their parents and communities, and national governments.  However in under-resourced countries, governments face a range of challenges in providing inclusive, equitable quality education for children with disabilities. In these countries, the building and strengthening of global partnerships is essential in achieving growth in education completion rates for girls and boys with vision impairment, from early childhood and preschool levels to higher education.  The presenter's objective is to describe the challenges and achievements in meeting the education goals and targets set by the United Nations. Drawing on personal experience as President of the International Council for Education of People with Visual Impairment(ICEVI), the presenter aims to achieve the following:   * To outline the education priorities of the United Nations agencies, the global education community, and civil society organisations; * To describe a range of innovative, collaborative approaches to promoting education for children with vision impairment that have been implemented by the International Council for Education of People with Visual Impairment (ICEVI), in partnership with the World Blind Union and the World Braille Council. |
| Room 4  12:10 | **Melissa Holland**: Walking through walls: the importance of failure in Orientation and Mobility (O&M) and how we can facilitate successful learning  Failure is an ongoing area of concern for all students with vision impairment (VI), in particular for non-visual travellers. In a school environment, we have a duty of care to protect our students from harm. However, without failure, students miss vital learning opportunities and chances to develop skills and knowledge. Although failure is generally accepted for sighted students within the mainstream curriculum, there continues to be a fear in allowing students with VI to fail, in particular with VI travel.  Through discussion with VI students, observation and direct training, the importance of failure is explored, with a focus on the impact for the student in the moment of failure, as well as the mid and long-term implications. Strategies to accept failure as a part of everyday travel are identified, with a goal to promote a healthy and active relationship with the idea of failures connection to effective learning when working towards the goal of independence. |

### 12.40-1.25 — Lunch

### 1.30-2.35

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| Rooms  1 & 2  1:30 | PEER PANEL **Aasha Shaw [facilitator]:** Our World Changers: Past, Present and the Future  As educators of students with vision impairment, I believe we can gain immense knowledge by listening to adults who are able to reflect, honestly, on their schooling. Our panellists are a group of dynamic and interesting adults who all have a vision impairment. They will spend nearly an hour giving you the real deal—they will be raw and honest about their education, what worked and what didn't, they will tell us how we can improve as educators and what they would go back and tell their 12-year-old selves. You will have the opportunity to ask questions of this inspiring panel.  I guarantee they will make you laugh and may even bring a tear to your eye. Hopefully you will leave our session inspired. We can all have immense post school goals for the students we work with—university, employment, marriage, children … |

### 1.30-2.00

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| Room 3  1:30 | **Barbara Farouk** **and** **Vilisi Salafabisi:** Fiji Society for the Blind: Creating a clear vision for the future  The Fiji Society for the Blind has been in existence since 1970 as the service provider for the educational and rehabilitation needs for both the children and adults with visual impairment.  Whilst we stand proud as the only educational institution for the Blind and Visually Impaired, we have encountered several barriers that have hindered our advocacy to create awareness, parental counselling, training and education for the visually impaired.  There is a lack of full acceptance by the parents of their child's disability, their lack of special skills to handle their child with vision impairment and unfortunate as it may sound there is a significant number of parents that do not put in their 100% efforts to provide educational opportunities to the child because of their social or work commitments.  Another barrier is the lack of specialized teachers and personnel in the schools.  The introduction of Inclusive Education in the mainstream school, by the Government is not 100% effective, as that school is not fully equipped with trained teachers, equipment and infrastructure to handle a totally blind student.  Another major challenge is the scarcity of employment and social opportunity for the blind. The totally blind suffer the most. They join the increasing numbers of severely disabled persons who are either entirely left out or, at its best, receive only token attention.  In our presentation, we intend to find solutions to overcome these barriers.  For the future we will explore and expand opportunities for the people with vision impairment so that they are able to work alongside the sighted world. We also intend to participate in dialogue with the appropriate authorities including the Government, so that a more precise policy is designed to meet the educational needs of the Visually Impaired persons. |
| Room 4  1:30 | **Sandy Joint:** Public and commercial Braille: Bring on “Braille” for a clearer future view  Ramps not only assist those with mobility impairments, but also those who are elderly, mums and dad with prams, and cyclist racing to catch a train. Interpreters in theatres and closed captions on TV's open worlds for people who are deaf, (and for people at bus terminals, and airports who wish towatch TV, follow timetables and gate information). In all these situations the visibility of ramps, interpreters and close caption text on TV, is normalised and raises the profile of physical and hearing disabilities.  The objective of this session is to brainstorm, by looking at ongoing ways to increase Braille presence in the community. The need for Braille around the house to further increase independence, by the placement of commercial braille labels/and tactile indicators on appliances, e.g. washing machines, microwaves, Braille imprinted on cans and jar lids etc. In fact, any malleable materials where print is found could easily have Braille or tactile indicators placed.  Braille is tangible, braille can be easily referred to, and braille provides an ongoing form of access. Braille and Tactile indicators will not only assist people who are blind and deafblind but many low vision members of society to differentiate between packaged products such as shampoo, conditioner and hand lotion (especially in hotel bathrooms when you forget your glasses). Finally, Braille is an icon, its presence on daily objects and public places will go a long way to raise the profile of not only “people who are Blind or Deafblind”, but the wider disability sector. |

### 2.05-2.35

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| Room 3  2:05 | **Christina Christensen:** Technology and Braille Music transcription. What are the possibilities?  My experience working as a music transcriber at Vision Australia has created the ideal environment to further research and put into practise improved work methods within the transcribing of print to braille music. This has been made possible through access to diverse software such as Sibelius, Photoscore, Goodfeel to name a few. Our transcription team has also actively participated in International DAISY braille music conferences and gained an appreciation for the prospective future scenario on a global plan  How has Braille Music transcription evolved?   * Originally a manual task performed by sighted or blind people using Perkins Brailing machines, the process of transcribing print to Braille music has undergone significant changes within the digital age of computers and internet information exchange now available. * A brief summary of the history of Braille Music transcription will be provided to demonstrate these points.   What are the current trends being used for transcribing braille music?   * This presentation will focus on the latest trends used for transcribing music viewed from internal work methods at Vision Australia. * Current international based research derived from attendance at the DAISY Braille Music Project Consortium conferences held in Europe will be referenced regarding most recent updates.   The Music XML file: Pros and Cons   * The focus here will be in relation to the use of Music XML for braille music users, a common file type that can be read by a number of notation software. This can significantly speed up the process of conversion from print to braille music and opens greater options for accessing free online libraries of music in this format. * What are the challenges involved in using Music XML files for vision impaired end users? Examples based on a blind colleague's own experiences as a professional singer in Sydney based choirs will be discussed to highlight these points.   Does the future ahead for vision impaired Braille Music end users look promising? Further ongoing global research and improvements to be made on the Music XML file will be shared. |
| Room 4  2:05 | **Claire Garrett:** Incorporating Versatility in the Design of Tactile Teaching Aids for Blind and Visually Impaired Students: A Case Study  When resources are limited, versatility in a teaching aid is a bonus and ideally should be part of the design process. However, it is not always easy to anticipate all potential uses of a specific aid, especiallywhen the designer is notnecessarily working directly in the field. A collaborative effort between designers, specialist teachers and students is therefore of great benefit.  This presentation describes the development of a simple modular grid system that now forms a universal platform for hands on learning for several aspects of mathematics, map referencing, music and literacy at the primary school level, as well as some shared fun with simple games.  From the designer's initial presentation of a tactile shape version of 2×2 sudoku to staff at Statewide Vision Resource Centre (SVRC) in Victoria came the request for a simple framework suitable for young visually impaired students to use the sudoku like counters to explore the pre-maths concepts of pattern recognition and sequencing. A laser cut wooden grid system was subsequently designed around the basis of square wells that neatly trap the shape counters. Experimentation with laser etching to create both acceptable Braille and matching text on the counters aroused keen interest  from the SVRC maths specialist who saw the possibility of the grid system providing a concrete introduction to vertical maths formats. Simple graphing and map referencing followed. At this point the music specialist realised the potential of the grid for teaching rhythm with appropriately brailled counters. And finally, design of a three-part counter to represent an oversized braille cell enabled word play with the grids, bypassing the frustration of searching for letters.  In the developmental process, feedback from the students and teachers lead to modification of the grid module unit to facilitate easier assembly. A productive joint effort with a versatile outcome. |

### 2.40-3.10

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| Rooms  1 & 2  2:40 | **Melissa Fanshawe, Polly Goodwin** **and** **Natalie Kaine:** Implementation of the expanded core curriculum; the process of accrediting standardised national curriculum to provide equitable access to schooling for students who are blind [Continued after afternoon tea]  The Expanded Core Curriculum (ECC) provides disability-specific skills required to access learning for students who are blind or vision impaired and is recognised by Specialist teachers in vision impairment as essential to student success in Education (SPEVI, 2016). However, according to Opie (2018) within mainstream schools there is a lack of knowledge about the importance of the Expanded Core Curriculum and ambiguity around who should be teaching these specialist skills.  This session looks at the work that we are doing across Australia to have components of the Expanded Core Curriculum recognised as part of Junior and Senior National Curricula. We aim to create a scope and sequence for some elements of the ECC (initially braille and adaptive technology), map these to the Australian Curriculum to then create units and assessment to be accredited for Junior and Senior Secondary. It is hoped that creating a standardised national curriculum will provide a shared understanding of what is required and moderate expectations. Students would then elect to enrol in an Adaptive Technology elective, for example, instead of Japanese language, or visual arts. We see this as important, both to validate the skillset achieved and recognition of the additional time required to access learning. It can also open up these subjects to all young people who may be interested, thereby raising awareness and understanding.  Standardised accreditation will allow young people who are blind or have low vision to show potential employers their skills that are nationally recognised as they compete in a competitive job market.  This presentation will discuss what is happening in this space and how you can make a difference. |
| Room 4  2:40 | **Nihal Iscel:** Disability rights and advocacy in Australia and Turkey: sharing information  The City of Gaziantep in Turkey was approached to organise a small conference to discuss disability rights and advocacy for people who are blind and with low vision in Turkey and Australia. The objective was to find out what programs both countries have been implementing to progress disability rights and advocacy since they've signed up to the UNCRPD. What's working well for people who are blind or with low vision and if there are any gaps in supports and services and who would be responsible for progressing disability rights and advocacy in each country.  The conference took place in Gaziantep on 15 June 2019 where more than 200 people participated including people with vision impairment, hearing impairment, physical disabilities, their families and carers, academics teaching special education to potential teachers, and service providers supporting people with disability.  At the conference, a presentation on meaning and importance of individual and systemic advocacy was provided. A questionnaire was prepared and participants were asked to break into groups to provide responses to the questions. From the responses of the group work, it was established that while there are good progress in the provision of services, there were also major gaps in both countries since the UNCRPD.  The responses from the questionnaire indicated that there is no known government advocacy program in Turkey like the one in Australia. In Turkey, accessibility of public offices, parks, footpaths and schools were problematic; Inclusive education for children with disability hasn't been properly developed and resourced; Accessibility to public transport is limited; and unemployment in both countries was very high.  A report with findings was prepared and sent to the Lord Mayor of the City of Gaziantep as well as to the associations supporting people who are blind and with low vision. |

### 3.10-3.30 — Afternoon tea

### 3.30-4.30

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| Rooms  1 & 2  3:30 | FORUM **Facilitator: Melissa Fanshawe:** Implementation of the expanded core curriculum; the process of accrediting standardised national curriculum to provide equitable access to schooling for students who are blind  [Continued from previous session] |
| Room 3  3:30 | WORKSHOP **Raija Linckers:** Using everyday materials to create tactile resources for the very young child with a significant vision loss  In this workshop you will gain some ideas and make a resource which will encourage children to reach out and explore their world.  Through play and exploration, the child is awakening his sense of touch and of hearing and stimulated to use his functional vision.  Resources which will be demonstrated will include but not limited to the following.  Tactile mats:With the very young child with some vision this may be a simple tactile mat which entices further exploration. For the blind child it may incorporate a sound stimulus eg bells, beads or buttons within the object.  Mats can be foam which lock together to create a cube. Each mat can be covered in a different texture using a vast variety of stimulating surfaces.  Materials used can be textured adhesive tapes, strings of various thicknesses, zips both metal and plastic and matchsticks which can be used to make zigzag patterns.  Small tactile boxes:Small boxes or plastic containers with textures on each surface, inside and outside.  Black and white boxes:Using a shoe box or similar, painting it black and adding white lines of varying thicknesses to stimulate vision. Other white objects can supply interest on the other surfaces.  Tracking cards:Tracking cards for those pre-braille students who are beginning to prepare their fingers to track from left to right. The first aim is to differentiate the properties of the materials being tracked and the shapes created. Eventually finer and finer lines are made until the student is ready to read braille dots.  Sense Sacks:A sense sack is a cloth bag containing a picture book, a braille copy of that book and real objects from the story. The purpose of the sensesack is for the student to take it home to share an experience of story with sighted siblings and the extended family. |
| Room 4  3:30 | WORKSHOP **Michael Evans:** Innovative technology to support, motivate and engage clients with their O&M  This interactive workshop aims to provide information on innovative technology used to support, motivate and engage clients, in particular children, with their orientation and mobility (O&M). Through my previous experience as a teacher, and my current work as an O&M Specialist in the Children's Mobility Team at Guide Dogs Victoria, it is apparent that using particular items of technology makes learning during client sessions more purposeful, engaging and fun, leading to better outcomes. In this session, I will present QR Codes, Bluetooth trackers, Microsoft Soundscape, Ball FX and Cane FX, giving participants an opportunity to experience first-hand the positive impact technology can have on the learning experience and essentially developing their orientation and mobility skills. The workshop is to encourage thinking outside the typical tool chest of equipment available and through adaptation meet client needs for mobility.  QR Codes: A QR Code is a square barcode made up of pixels which holds different types of data and information—similar to a barcode on a supermarket item. QR stands for quick response, and anyone can create, use or scan a QR code.  Bluetooth trackers: Bluetooth trackers let you use a smartphone app to locate anything the Bluetooth tracker is attached to.  Microsoft Soundscape: Microsoft Soundscape is a free app that supports people who are blind or have low vision to navigate their world with 3D audio.  Ball FX: Ball FX is a yellow volleyball made from a high density foam that uses existing technology to emit sound effects. The initial design uses existing smartphone apps that create soundswhen the smartphone is moved.  Cane FX: Cane FX is a long cane using existing technology to emit sound effects when the cane is used. The initial design uses existing smartphone apps that create sounds when the smartphone is moved. |

**Early finish unless involved in**

**LIVES (Leaders in Vision Impairment)**

### 4.30-5.30

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| Room 4 | **LIVES Meeting** (Leaders in Vision Impairment) — leaders and representatives of organisations supporting children and adults with vision impairment |

### Gala dinner

### Pullman Adelaide 6:30 for 7pm start

### 6:30-10:30pm

### Theme: “Bright Futures”

### Dress code: Semi-formal

### Live entertainment provided by Circa 74

## WEDNESDAY 15TH JANUARY 2020

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| 8.30 am | **Registration (day delegates) and Networking:** Tea and coffee on arrival |
| 9-9.15 | **Housekeeping** |
| 9.15-10.30 | KEYNOTE **Graeme Douglas and Mike McLinden:** Vision Impairment Education: What should we do as a field? Creating a clear vision of the role of the specialist educator in a complex and changing world |

### 10.30-11.00 am — Morning Tea

### 11.00-11.30

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| Room 1  11:00 | **Lars Ballieu Christensen** **and** **Tanja Stevns:** A digital library for alternate formats shared by educational settings—How to improve accessibility, higher efficiency and better practice  Providing and producing educational material in accessible, alternate formats is time-consuming, costly and complicated. Available alternate formats are often limited and the authors of education materials rarely pay any attention to accessibility. Offering the potential to search, share, reuse and automatically convert, digital libraries may be the remedy. Educational institutions often spend much time and resources to locate and convert files into alternate formats for students, without knowing if the task was already completed elsewhere.  High staff turnover and uncertain funding also make it difficult to maintain required skills amongst alternate media producers. With limited scope for sharing and repurposing, most media conversions are done case-by-case, rarely considering the benefits of standardised formats and parallel publishing. And teachers and faculty members seem to have little attention on authoring accessible material. Building on the above issues, the presentation will discuss how a digital library combined with streamlined authoring procedures can serve as a foundation for efficient reuse and repurposing of material. It will furthermore discuss how accessibility of material in a library as well as new material can be gradually enhanced, and how multiple institutions can collaborate on sharing a digital library to the benefit of print impaired students. The presenters will share experience on implementing digital libraries with actual examples from Europe and the USA. |
| Room 2  11:00 | **Wendy Voorn:** Accessible computational thinking curriculum  The world is filled with amazing technology with limitless possibilities. It can make our lives easier, but more importantly, it can allow us to access more information from the world around us. The best way to benefit from technology, though, is to know something about it - how it works, where it gets information, and why it acts or reacts the way it does. You don't have to know how to build technology, like a programmer, but to formulate a problem in such a way that a computer can solve it, you do have to know something about computational thinking (CT).  Royal Dutch Visio has developed an accessible CT curriculum for students aged five—twelve years. They learn the four key elements (algorithm, patterns, abstraction and decomposition) by doing. In this curriculum, the computer is hardly used; most exercises are “unplugged” and therefore fully accessible. This approach allows them to learn the basics in a more effective way than many of the other current options available.  The key element of computational thinking is downsizing, similar to abstraction. To downsize, the student learns to limit the problem to its core, and to remove unnecessary parts. They learn to use patterns to find similarities between and within the problem. They learn not to look at the same issue twice, and that patterns can help to determine trends. They practice breaking a problem into smaller parts, known as decomposition. Having smaller, more manageable parts provides insight into the problem and allows more people to work on it. To do so, students learn to use algorithms, like a recipe, which follow step-by-step instructions for solving computational problems.  In this workshop, the CT curriculum is presented by learning and experiencing firsthand the concepts of CT, using the accessible lesson materials developed by Royal Dutch Visio. |
| Room 3  11:00 | **Frances Mary D'Andrea:** Introduction: Reading Adventure Time!  After attending this presentation:   1. Participants in this session will be able to list potential predictors of braille reading comprehension. 2. Participants will be able to name common miscues in braille reading. 3. Participants will discuss factors related to braille reading fluency.   Introduction: Reading Adventure Time!, formerly known as the pilot version of the iBraille Challenge Mobile App, was designed as an educational technology tool operating on an Apple iPad using a refreshable braille display. It includes assessments and activities to support braille reading instruction for students in 1st-12th grades.  Methods: The app was developed under a Stepping Up Technology Grant (H327S120007) and was distributed to more than 50 teachers and students. Students read passages on their braille displays and responded to several comprehension questions. Comprehension measures including pre/post test scores and intermittent progress monitoring were collected.  Results: Participants who used the app showed positive correlations in several variables. Comprehension of literary and expository text were highly positively correlated .78 (p<.000). Student participants placed in the apprentice and varsity categories answered slightly more questions correctly when reading silently. Although students were allowed to use re-reading as a comprehension strategy, it was rarely implemented; when it was, there were positive correlations between the number of rereads and comprehension.  Discussion: Generally, students' reading comprehension was a strength. Students' comprehension at lower grade levels was slightly higher than in upper grade levels, and comprehension scores were similar for both literary (fictional) and expository (non-fiction) at all ages. Students' comprehension was slightly better when reading silently versus reading orally. Students used re-reading as a strategy to assist with comprehension, although not extensively.  Implications for Practitioners: The study provides evidence supporting Reading Adventure Time! as a digital literacy tool. The supplemental intervention may be used in conjunction with a total, balanced literacy program. |
| Room 4  11:00 | **Lil Deverell** **and** **Michael Evans:** Measuring vision, orientation and mobility using the VROOM and OMO tools  Clinical vision measures can't capture the complexity of functional vision in the wild or predict a person's travel skills. In contrast, the VROOM tool measures functional vision for mobility (Vision-Related Outcomes in Orientation and Mobility), and the OMO tool measures Orientation and Mobility Outcomes in everyday places like home, school and down the street. These functional assessment tools give vision and O&M skills each a score out of 50. They are constructivist measures, not objective or subjective measures, which means that ratings are made together based on shared observations and opinions of the person's capabilities. Everyone's opinion matters—kids, parents, teachers and other professionals.  Objective: To investigate how constructivist measures create strong measurement data about functional vision and O&M and then interpret the resulting scores.  Methods: The VROOM and OMO tools were developed in the context of bionic vision research (n=43) then validated with 51 guide dog users. They are now being trialled in Australia, Malaysia and the UK with children and adults to determine their scope of application and create guidelines for interpreting the data. We will present case studies that show how VROOM and OMO work as assessment tools during early childhood, primary and secondary school, and adulthood.  Findings: The VROOM tool sorts functional vision scores into: Functionally blind (0), Fifty shades of grey (1-10), visual Fragments (11-20), visual Frameworks (21-30), visual Features (31-40), Facial expressions (41-49) and Full vision (50). Thus far, the working categories for OMO scores are: Comatose (0), Cared for (1-10), Co-active (11-20), Cautious (21-30), Coping (31-40), Confident (41-49) and Carefree (50).  Conclusions: The VROOM and OMO tools provide a common language for discussing functional vision and O&M skills and reinforce that vision does not predict a person's mobility skills. |

### 11.35-12.05

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| Room 1  11:35 | **Irene McMinn:** Pathway to Independence for Deafblind People  This paper will look at the use of Braille users who are Deafblind and how it can improve their quality of life and enhance their ability to access information.  Braille generally, thought to be not necessary today as blind people can use audio books and information and computers with speech, but a Deafblind person cannot do this and without the use of Braille they are illiterate and unable to use a computer.  Braille technology is so important and can assist a person in many ways, whether it is a braille display to connect with a computer and give access to what is on the screen, a BrailleNote which I use for interpreting in meetings etc, so I can understand what is being said, a small braille display which can be used with an iPhone to read what is on the screen this will give the Deafblind Person access to the phone or a scanner which will connect to a braille display so that the person can read printed information. Some Deafblind people who have some remaining sight use iPads.  Braille has many other uses from labelling your medication so that you know what to take and when, writing letters to other braille users, to reading complete books and many magazines.  The Deafblind community are learning to use webinars as a means of connecting with each other and sharing information across Australia and then maybe the world.  My life as a literate Deafblind Person would not be as interesting as it is without the use of Braille and I would not be able to do what I am doing without it.  Braille must still be taught in school to both Blind and Deafblind children so that they can maximise their quality of life. |
| Room 2  11:35 | **Jarek Beksa** **and** **Phia Damsma:** Hey Alexa, what can I learn at home? Accessible use of smart speakers for education of children who are blind or have low vision  Parents of children who are blind or vision impaired are often looking for suitable, fun, early learning resources for numeracy and literacy, without success. At the 2019 VISCON conference in Sydney, a number of presenters and researchers emphasized the benefit for children to develop early literacy and pre-braille skills before they enter school.  Smart speakers present with a voice activated assistant, a feature that can be engaged to make educational games that are easy to use for young children. Children's TV programs and channels, such as Sesame Street and Nickelodeon, have created so-called children “skills” to engage children with smart speakers. Smart speakers are widely used inside the home. A 2019 survey of 1127 families in the US with children aged 2—8, showed that more than 40% use a smart speaker like Amazon Echo or Google Home. And that number is likely to increase rapidly.  We decided to explore the potential of mainstream smart speakers to support young children who are blind or vision impaired in the development of essential early learning skills in a home setting, together with parents, siblings and friends. No advanced tech skills are required, just simple use of voice commands and speech. Songs and audio effects can be implemented to increase the learning experience. We will present the current state of this innovative application of smart speakers. We aim to develop a series of educational games for young children who are blind or vision impaired—for use at home, and potentially in the classroom. |
| Room 3  11:35 | **Kerri Weaver:** Private Practice—into the future  Objective: Sharing the development of going into Private Practice as a specialist teacher in Vision Impairment, Early Childhood, Orientation & Mobility  Key findings: There is a lot involved in the development of a business and a sole provider is a challenge in itself. Sharing the ups, downs, achievements, successes and the ride into Better Start and NDIS.  Conclusions: Where am I now? The ongoing processes and tips for others considering the journey. |
| Room 4  11:35 | **Lil Deverell and Michael Evans:** Learning to measure vision, orientation and mobility using the VROOM and OMO tools  Objective: Workshop participants will learn to use two new assessment tools that enable us to move beyond reading and near tasks as measures of functional competence with low/no vision. The VROOM and OMO tools help to standardise professional observations, data records and reporting in the context of ordinary O&M assessment, without needing standardised venues or tasks that restrict the client's freedom of mind and movement. The VROOM tool measures Vision-Related Outcomes in Orientation and Mobility (functional vision) and the OMO tool measures Orientation and Mobility (O&M) Outcomes in everyday lived environments.  Methods: After a brief information session, workshop participants will pair up and test the VROOM and OMO tools with each other to generate real assessment data from a functional assessment walk and co-rating conversation. Then they can compare their real ratings with those generated using low vision simulators. Finally, participants will return to the group to debrief, interpret the measurement data and critique the VROOM and OMO tools.  Findings: O&M specialists can use the VROOM and OMO tools to generate comparable practice-based evidence about the functional capabilities of any person, of any age or disability, anywhere in the world, whether or not the person is an O&M client. These tools are currently being validated by O&M professionals working with different client groups, and then reviewed and refined for cultural relevance in Australia and beyond.  Conclusions: It remains to be seen whether the VROOM and OMO tools can also be used by visiting teachers, occupational therapists and other professionals to generate equally accurate and useful data about client capabilities in dynamic environments. We welcome feedback from workshop participants. |

### 12.10-12.40

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| Room 1  12:10 | **Lynne Loh:** Amblyopia and patching  Amblyopia is reduced visual acuity in one or both eyes in the absence of visual pathway abnormalities and despite optimal refractive correction.  Amblyopia treatment is aimed at achieving the best possible acuity in the amblyopic eye by occlusion of the better eye during vision developmental years – or the critical period.  This lecture will discuss eye development, some of the causes of amblyopia, methods and aims of treatment, and the possible outcomes of amblyopia therapy. |
| Room 2  12:10 | **Deborah Green and Aimee Peterken:** Te Roopu Whakahirahira—a fresh approach to preparing students for life beyond school  Faced with the challenges and constraints of a crowded secondary school curriculum, a group of Auckland Resource Teachers Vision created an aspirational program to teach the Expanded Core Curriculum to blind learners.  A cohort of six students were selected and their individual needs were identified; this would drive the direction of the program in an organic and collaborative process. A commitment to Te Tiriti O Waitangi led to the decision to use Mason Durie's Te Whare Tapa Wha health model as a framework to guide social, spiritual, physical and mental development.  An unintentional encounter with a historic waka (canoe) at Auckland Museum led to an enduring symbol of the journey through life. Students reflected upon who was currently in their waka helping them paddle, who could join their waka to support them now and in the future, and who would eventually leave their waka. By year two, the focus became learning how to steer our waka.  Meeting twice a term, students engaged in creative, real-life experiences designed to develop the necessary skills and attitudes needed for life beyond school. This included skills to help with socialisation, situational role plays, financial literacy, fundraising, exposure to work/study beyond school and community engagement. The second year culminated in a flight to Wellington and a once in a lifetime experience at Weta Workshop.  Our presentation will share with you our journey with these students over the past 2 years, the activities and experiences we have had, the positive outcomes and growth we have observed and the “a-ha!” moments we have had as teachers. Our hope is that this will inspire you to try something new in your own practice. |
| Room 3  12:10 | **Leona Holloway, Matthew Butler** **and** **Kim Marriott:** 3D printing for touch readers—A format for the future?  Graphics are ubiquitous in the classroom. For children who are blind or low vision, graphics are most commonly represented using tactile graphics, descriptions, or at-hand materials. 3D printing offers a new low-cost means of creating 3-dimensional representations of graphics for use by vision impaired students and their sighted peers. 3D printing may also be used to create customised classroom modifications.  In a 3 year Linkage Grant funded by the Australian Research Council, Monash University is partnering with the Round Table on Information Access for People with Print Disabilities, the Victorian Department of Education and Training, the Royal Institute for Deaf and Blind Children (RIDBC), Royal Society for the Blind (RSB) and Guide Dogs Victoria. The project aims to investigate the use of 3D printing for access to graphics for people with vision impairments in the fields of education and Orientation & Mobility. When are 3D prints the most appropriate format? What are the design considerations for 3D models to be used by touch? What skills are required to create and print 3D models? And what support do schools and producers require to enable adoption of this new medium?  In this presentation, Monash researchers will outline the project, describe the work done so far, and extend an invitation to SPEVI to get involved in the project as a member of Round Table. |
| Room 4  12:10 | **Christina Abbracciavento:** Cortical Vision Impairment (CVI)—Adapted materials for students  Objective: Delegates will develop some understanding of how to adapt books and present activities to individuals with CVI.  Increasing numbers of students with CVI are entering the education system, and it is widely believed that CVI is the single leading cause of vision impairment in developed countries. This session will provide examples of adapted materials for students with CVI, considering Phase I, Phase II and Phase III. It will consider the making of specialised books for the individual, as well as adapting picture books. The use of technology in the adaptation of materials will be discussed. |

### 12.40-1.25 — Lunch

### 1.30-2.00

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| Rooms 1 & 2  1:30 | **Melissa Cain and Melissa Fanshawe:** What's working in schools today: Perspectives and advice from students with a vision impairment, their parents and teachers  Thousands of students with a vision impairment or blindness attend mainstream schools in Australia. Their experiences depend on a number of pertinent factors, including teachers' understanding of the legal requirements to abide by the inclusive education agenda, the schools' understanding of the nature of vision impairments and the challenges they present, and their willingness to take on advice regarding adjustments to the curriculum, assessment, technology and learning environment.  This presentation puts forward the voices of students with vision impairment or blindness, their parents and teachers, to provide a contemporary picture of the types of alternative formats available and used in schools today, including braille and assistive technologies. These voices share how alternative formats to print are being accepted and used in the mainstream classroom and the barriers students face when access is denied or not valued. This presentation includes an interactive component, where participants collaborate to share their knowledge to inform the findings presented. |
| Room 3  1:30 | **Mel Stephens** **and** **Lil Deverell:** Coming of age in Oakleigh: Mel's story  How does a depressed school-leaver with ultra-low vision make the jump into adulthood? At 21, Mel and Guide Dog Darcy moved from country Victoria to Melbourne to live in Lil's backyard bungalow. Mel emerged 20 months later, ready for adult life, while Lil, an orientation and mobility (O&M) specialist gained new insights into blindness and finished a thesis about measuring functional vision. Four years on, Mel and Darcy live independently in Mildura with a menagerie of animals. Mel teaches assistive technology, travels widely and has circles of friends.  Objective: We investigate what went on in that bungalow. What are the costs and benefits of moving beyond professional engagement to create community?  Methods: We explore coming of age through stories and photos with attention to family, friends and faith; personality and the black dog of depression; education and occupational choices; technology and social media; money, meals, and mandatory tasks; places to be and people to see; horses, cruises, trains and travel.  Findings: We identify power dynamics, conflicts of interest and challenges that arose in mingling the lives and practices of professional and client, researcher and participant, landlady and tenant, mother and non-daughter, technophobe and early-adopter-Apple-orchardist, long cane and guide dog, city and country, middle class and bogan, Asperger's and ADHD. We define a five-point scale of relationships that incorporates (1) strangers, (2) service relationships, (3) acquaintances, (4) friends, and (5) intimates.  Conclusions: Young people need safe bridging places that help them to move into adulthood. Our scale of relationships can guide professionals, families and individuals to weave strong social fabric that clothes and protects vulnerable people, helps to define our sense of identity and connect with others as we all mature. |
| Room 4  1:30 | **Danielle Kruger:** Transition to a new school: The use of 3D maps to consolidate the learning and understanding of a new environment  The transition of moving schools, and in particular, moving from primary to secondary school, is a giant leap for all students. For many students who have very low vision or who are blind, there can be the additional worry of becoming orientated to the new environment. By combining traditional Orientation and Mobility sessions with a 3D map of the required school grounds, students can learn to understand their new surroundings better than when no 3D map was utilized. With a 3D map students can consolidate their understanding of not just the position of the buildings and specific travel routes, but also explore the uniqueness of each building, the relationship between the architecture and audible landmarks and clues, and other features not usually included in a “birds eye view” map. Having access to a 3D map prior to commencing training can provide the student with valuable familiarization before even visiting the school and also provides a resource that they can use in between Orientation and Mobility sessions, to “practice” travel routes, or further enhance their understanding of the buildings and grounds.  This presentation will allow participants to observe recordings of how students interact with and interpret the maps, and to learn more about how 3D maps support orientation and exploration of a new environment. |

### 2.05-3.10

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| Rooms 1 & 2  2:05 | KEYNOTE WORKSHOP **Graeme Douglas and Mike McLinden:** Transition into adulthood  In this workshop we present the findings and resources which have come from the United Kingdom, based on a 10 year Longitudinal Transitions Study and explore the implications for SPEVI. Further information about the study can be found on the VICTAR website at the University of Birmingham: |
| Room 3  2:05 | WORKSHOP **Ross Sims** **and** **Tristan Fergusson:** Assistive Technology in the classroom  Assistive technology in the classroom—both in a mainstream classroom and in a specialist classroom—can be a tool to “level the playing field” and make the curriculum accessible for all students. In this workshop session, we will “live a day in the life” of three students at various stages of their education who either use large print or braille. We will also examine a student in their home environment, specifically focusing on the technologies they might use, how they can ensure they can access the curriculum and how they can access recreational activities within the home. In this hands-on session, participants will be able to interact with the technologies, learn more about how the technologies can help students in the classroom and at home and have a chance to ask questions of both presenters who have and continue to work extensively in the area of assistive technologies. |
| Room 4  2:05 | WORKSHOP **Kaitlyn Hawking**: The 5 Rs: The application of Self-Regulation as the foundation of school engagement post complete  This workshop is grounded in the experience of a non-verbal student with Autism and an Intellectual Disability who acquired complete vision loss after an illness at age 10. The experience of losing his vision compounded pre-existing difficulties with relationship building and academic engagement which resulted in a prolonged period of school-refusal. School attendance induced a near constant state of fight and flight leading to an increase in behaviours of concern. The application of the Self-Reg framework in the subsequent 3 years has been instrumental fostering trusting relationships, accessing the Australian Curriculum, learning to talk, developing braille readiness, building orientation and mobility skills and engagement in the expanded core curriculum.  Self-Reg (developed by Stuart Shanker of the MEHRIT Centre) sees a paradigm shift in how we conceptualise behaviours of concern. It is a framework concerned with how much stress we are under, how we manage this stress, how much energy we expend in the process and how we recover from this energy expenditure. The 5 Rs of Self-Reg will be unpacked with special consideration given to the impact of acquired vision loss in the school environment:   * Reframe: identifying the differences between “misbehaviour” and “stress behaviour.” How might stress-behaviour present in a child with vision loss? * Recognise: what stressors may be experienced across the five domains of Self-Reg (biological, emotion, cognitive, social and pro-social) by a child with a vision loss in the school environment? * Reduce: how can we lower or eliminate the impact of these stressors? * Reflect: being aware of explicit and incidental opportunities to build self-awareness of stress levels. What adaptions need to be made to typically visually-based programs? * Respond: developing individualised strategies to “fill-up” the student's energy tank when it is running low.   Throughout the workshop, participants will be given the opportunity to personalise their learning to their own students, share strategies and learn how to independently further their Self-Reg journey. |

### 3.10-3.30 — Afternoon tea

### 3.30-4.30

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| Rooms 1 & 2  3:30 | WORKSHOP **Leona Holloway, Matthew Butler, Kim Marriott** and **Debra Lewis:** Hands on 3D printed learning tools for tactile literacy  3D printing offers a new format for the creation of accessible materials for students who are blind or have low vision. Particularly for younger learners, the 3D format may be more readily understood than tactile graphics, offering a more engaging product that can be shared with sighted classmates.  In this hands-on workshop, participants will be invited to touch and play with a range of 3D printed models designed or printed for vision impaired students. Which of these models would work well in your classrooms? How could the models be improved? What else would you like to have made? Is 3D printing a practical solution for creation and distribution of materials in schools?  Workshop participants will be invited to input into the research project by providing feedback in the workshop and beyond. |
| Room 3  3:30 | WORKSHOP **Clare O'Sullivan**: When too much talking is too much talking  After attending this presentation:   1. Participants in this session will be able to list potential predictors of braille reading comprehension. 2. Participants will be able to name common miscues in braille reading. 3. Participants will discuss factors related to braille reading fluency.   Introduction: Reading Adventure Time!, formerly known as the pilot version of the iBraille Challenge Mobile App, was designed as an educational technology tool operating on an Apple iPad using a refreshable braille display. It includes assessments and activities to support braille reading instruction for students in 1st-12th grades.  Methods: The app was developed under a Stepping Up Technology Grant (H327S120007) and was distributed to more than 50 teachers and students. Students read passages on their braille displays and responded to several comprehension questions. Comprehension measures including pre/post test scores and intermittent progress monitoring were collected.  Results: Participants who used the app showed positive correlations in several variables. Comprehension of literary and expository text were highly positively correlated .78 (p<.000). Student participants placed in the apprentice and varsity categories answered slightly more questions correctly when reading silently. Although students were allowed to use re-reading as a comprehension strategy, it was rarely implemented; when it was, there were positive correlations between the number of rereads and comprehension.  Discussion: Generally, students' reading comprehension was a strength. Students' comprehension at lower grade levels was slightly higher than in upper grade levels, and comprehension scores were similar for both literary (fictional) and expository (non-fiction) at all ages. Students' comprehension was slightly better when reading silently versus reading orally. Students used re-reading as a strategy to assist with comprehension, although not extensively.  Implications for Practitioners: The study provides evidence supporting Reading Adventure Time! as a digital literacy tool. The supplemental intervention may be used in conjunction with a total, balanced literacy program. |
| Room 4  3:30 | WORKSHOP **Charlie Roberts:** Accessible Calculators  Is vertical braille Maths simply a visual representation that takes our students too long? Should our students be offered an alternative, computing more with a Cranmar Abacus?  Are our students less likely to study Year 11 & 12 Mathematics due to our curriculum authorities inflexibility to approve the use of accessible calculators in certain states? Is it time for states to unite and educate our curriculum authorities of our student's calculator needs for increased independence in senior school and their next environment, further study or employment?  In the workshop we will experience a range of accessible calculator options for primary & secondary students. Depending on participant interest, this could include the:   * Cranmar Abacus * Talking & Large Print calculators * Standard & Scientific IOS options * Audio Graphing Calculator software * Emulator software * Desmos scientific & graphing calculators * EquatIO : Math writing software with Desmos graphing function * Orion/TI 84 Plus talking graphics calculator * BrailleNote and BrailleSense scientific calculators and graphing function * Option for Computer Algebraic System (CAS) calculator users |

### 4.30-5.00

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| Room 1 | **Conference wrap-up** |

## THURSDAY 16TH JANUARY 2020

Tour the South Australian School for Vision Impaired (SASVI) and Kilparrin Teaching and Assessment School and Services (Kilparrin). Meet the teachers, view the purpose-built schools, specialist learning environments, Alternate Format Production and showcased students' work.

Note: This is an optional activity and delegates will need to indicate if they are interested in the tour at the registration desk.

### 8.30-11.30

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| 8.30-9.00 am | Make your way to SASVI and Kilparrin, 1-B Duncan Ave, Park Holme  Public Transport information to follow |
| 9.00-10.30 | Welcome address: Peter Haskell and Cathy Roche-Wells  Tour of SASVI and Kilparrin Sites  Demonstrations in select classrooms |
| 10.30 | Morning tea provided by SASVI and Kilparrin |

#### Transport Information:

Car: The schools are located 20 minutes from the Pullman.

Public Transport: Catch the M44 bus from Grenfell St (Stop S1—South Side), a 3 minute walk from the Pullman. Stop at stop 20 on Marion road (approximately 30 minute bus ride), then walk to SASVI/Kilparrin (3 minute walk).

Note: Adelaide Airport is an approximate 25 minute taxi ride from SASVI/Kilparrin

## Poster presentations—Monday 12.40-1.25 (during lunch)

#### Braille and Accessible Format Standards: Braille Authority of Australia (ABA), Braille Authority of New Zealand Aotearoa Trust (BANZAT), International Council on English Braille (ICEB) and Roundtable on Information Access for People with Print Disabilities (Roundtable)

**Kathy Riessen, on behalf of Maria Stevens (BANZAT), Jordie Howell (ABA), Leona Holloway (ICEB) and Sonali Marathe (Roundtable)**

Australia and New Zealand each have a formal braille authority whose role amongst other things is to set the standards for braille codes and formatting within their jurisdiction, maintain consistency with current international developments of all braille codes and act as an accrediting body for practitioners. Both countries are foundation members of ICEB, the international body which developed and maintains the Unified English Braille (UEB) which is used throughout the English speaking world.

ABA is a subcommittee of Roundtable, and BANZAT is a member. Roundtable has written and maintains a number of documents on various accessible format standards.

The aim of this static/poster presentation is to:

* Describe the structures of ABA, BANZAT, ICEB and Roundtable and their defined roles.
* Describe how each of these bodies are linked and the roles they have in ensuring standards of braille and other accessible formats are maintained.
* Showcase examples of the documentation and resources endorsed by each of the bodies.
* Give information and examples for the Trans-Tasman Proficiency Test in Unified English Braille, held each year in October and jointly administered by ABA and BANZAT.
* List the various means of communications used by ABA and BANZAT

#### Sydney Kids X Marks the Spot (Mapping and Route Travel)

**Amy Mckibbins, Sarah Farrugia Martin**

Objective**:** Sydney Kids is a holiday program run by Guide Dogs NSW/ACT for students with vision impairment aged 6-12. The program aims to develop Orientation & Mobility (O&M) skills and confidence in a group setting and utilise the benefits of peer learning. In July 2019, Guide Dogs NSW/ACT ran the “Sydney Kids X Marks the Spot” program. This program focused on the development of mapping skills, a critical component of O&M, and the practical applications for travel.

Methods:Activities incorporating use of technology and other materials were designed and implemented by O&M Specialists, for students to;

* Learn how to create their own tactile and audio maps
* Use information from visual, tactile and/or audio maps to uncover hidden treasure in indoor and outdoor environments
* Understand how a map can be useful across different environments.

Key Findings:Children implemented mapping and technology skills learnt on Day 1 when travelling to a fun, community activity on Day 2.

Conclusion: Having a vision impairment affects various life-aspects related to participation, including activities related to school, social skills and relationships, activities of daily living, leisure time and mobility. The effectiveness of developing O&M skills in a group setting paired with implementation for travel to a fun activity has shown to be an effective way to engage students and support O&M skill development.

#### A Modular Tactile System Designed to Aid Blind and Visually Impaired Students Understand the Complexities of Road Intersections.

**Dr Claire Garrett**

Aim: To design an interactive tactile graphic with enough detail and flexibility to assist with teaching blind and vision impaired children to understand traffic flows at different types of intersections and the wide variety of pedestrian access routes associated with them.

Method:Intersection layouts were broken down into key components suitable to form the basis of a modular, 3D representation of each intersection. The different components were modelled in plywood to the approximate scale of the "matchbox" car and laser etching was used to generate textures on the ply to demark nonpaved surfaces and also represent TGSIs. The models were then used as moulds for vacuum forming white high impact polystyrene (HIPS) sheet to produce light weight robust replicas. Road line markings, including pedestrian crossings, were laser cut from HIPS sheet. Traffic signals were represented by small plywood models of just the tactile arrow and button unit, mounted on short poles that could be inserted into the appropriate modules. A working model of an intersection under study could then be created by placing the relevant modules on a base mat of 6mm black nonslip foam, representing the road surface.

Results:There was sufficient friction between the HIPS and foam surfaces for the intersection modules and line markings to remain in place while being handled by students exploring the relationship between road, kerb, nature strip, footpath and fence-line. The model was used to demonstrate where and when a blind traveller would need to make an auditory scan for vehicles at the different types of intersections and to illustrate the importance of understanding the variability in alignment of pram ramps.

Conclusion:The combination of vacuum formed components and a foam base map can provide a relatively cheap and extremely flexible tactile 3D graphic to assist with teaching road intersection safety.

#### Using 3D printing to improve access to graphics for people with vision impairments

**Leona Holloway, Matthew Butler and Kim Marriott**

We report on a research project investigating the use of 3D printing as an affordable new mainstream technology for creating accessible graphics. This project is being conducted by Monash University in partnership with the Department of Education Victoria, RIDBC, Guide Dogs Victoria, RSB and the Round Table on Information Access for People with Print Disabilities, with support from its members including SPEVI. The project began in September 2018 and will run for 3 years.

The project has six work packages: 3D printing for tactile literacy; 3D printing for access to STEM materials; 3D printing for teaching place and geography; 3D printing for O&M training; adding interactive labels to accessible 3D prints; and building sector capability to produce and use 3D prints. A key outcome will be a set of guidelines on the design and implementation of accessible 3D prints.

Work on 3D printing for education began with consultation with specialist vision teachers and accessible formats producers from the Department of Education & Training Victoria and the Royal Institute for Deaf and Blind Children. We also examined the curriculum to identify areas in which 3D materials could assist. A range of 3D printable materials were sourced or designed. Testing has begun with students and their teachers.

The poster will include some sample prints and links to free materials that can be printed and tested by SPEVI members.

#### iExpress—ICT screening instrument for MDVI

**Wendy Voorn**

Persons with MDVI are facing major challenges in expressing themselves, in communication and learning. Only a small number of institutes in Europe are using digital screening instruments for testing ICT skills of MDVI children and there is no universal tool to test and train them. Nowadays, special teachers are working with a set of different tools from different companies resulting in high expenses or limited usability of those tools related to MDVI education.

Together with three European partners, Royal Dutch Visio started a project, funded by the European Union, to tackle this challenge. In the first part of the project we developed and validated a screening tool for MDVI professionals. The second part of the project delivers a comprehensive toolkit that provides MDVI professionals with guidelines and innovative software to use the validated screening instrument to test and train MDVI children and to increase children's ICT skills and capabilities with assistive devices. The solution will include the function of an individual ICT plan to plan next steps after assessment and to monitor the child's progress over time. The applications will be, as much as possible, language free so it will enable the use by any professional.

After the project has finished in January 2021, any professional working with MDVI children will have access to a ready-to-use-toolkit to use in their daily work. The main contents are: the screening list and software that is built on the screening list components, supporting the user to work with the instrument and the ultimate target group. Since the toolkit also includes training materials, guidelines and recommendations for use, it is a complete set for immediate use.

#### Implementing a routines-based approach to early childhood orientation and mobility with children with vision impairment

**Dr. Bronwyn Scott, Independent Options for Mobility, Melbourne**

For children who are blind or have low vision, the development of orientation and mobility (O&M) skills which enable them to travel safely and independently through their environment is critically important. O&M with children aged birth to five years includes the development of purposeful and self-initiated movement, concept and sensory development, and the use of a mobility aid such as a long cane where appropriate. This poster describes how O&M Specialists can incorporate a routines-based approach to O&M assessment and intervention. This approach builds the capacity of parents and caregivers to support their child’s O&M development, including the use of a long cane, within their daily routines. One strategy that will be included is the use of a ‘teaching cane’, which empowers families, caregivers and other early childhood professionals to develop a first-hand understanding of long cane mobility to support a child’s early independence.

# Events Management Team

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# Thank you

The Local Organising Committee would like to thank you for attending the SPEVI 2020 Conference in Adelaide. Thank you to all the people behind the scenes that make this event run smoothly and to the presenters that have positively contributed to the vision impairment community.

# Notes

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