Vision Impairment Conference for Educators 2014
Working with the PLVC

Ursula White BSc(Hons)MCOptom
Paediatric Low Vision Clinic
Points to cover

- Low vision “kit” for AVT’s
- Electronic options
- Loan Equipment
- Specialised Spectacle Suppliers
- Importance of Sunspecs
Points to cover

• Low vision “kit” for AVT’s
  • Electronic testing - ipad
  • Loan Equipment
  • Specialised Spectacle Suppliers
  • Importance of Sunspects
Vision “Kit” for AVT’s

- Lea Hyvarinen shapes
- Lea Hyvarinen Numbers
- Lea Hyvarinen shapes near chart
- 100’s and 1000’s
- Stycar balls
- Red/yellow sponge ball
- Mirror
- Light and sound toy
Vision “Kit” for AVT’s

- Lea Hyvarinen charts
  shapes/numbers/near
Lea Hyvarinen

- Lights on
- Check for glare (curtains/windows)
- Start at 3m
- Point
- 1 or 2 letters from each line till struggling, then whole line
- Might need to cover some
- Move closer if needed
Lea Hyvarinen
Lea Hyvarinen

- If you move closer, then replace the “3” denominator with the appropriate number ie. 2 or 1.
- The 6 fraction on the other side is no longer equivalent.
- Best to record for distance you worked at.
Vision “Kit” for AVT’s

- 100’s and 1000’s!
100’s & 1000’s

- Start with a few
- Hand/tray
- Use 50cm and 30cm – conversion charts
- Try one/two low contrast
- Record dist, contrast
Testing vision

• 100’s and 1000’s!
Vision “Kit” for AVT’s

• Stycar balls
Stycar balls

- Plain dark background – grey is best
- Conversion chart available
- OR note diameter of ball and distance test performed.
Vision “Kit” for AVT’s

- Red/yellow sponge balls
Sponge balls

• Note diameter and colour of ball
• Note distance at which student “saw” ball
• Can also note if student more aware in one particular area of field
Vision “Kit” for AVT’s

• Mirror
Mirror

• Note any interest
• What are they looking at: themselves/movement/light?
Vision “Kit” for AVT’s

- Light and sound toy
Light and sound toy

- Use sound to get attention
- See if they track
- Note if more aware on one side
Testing vision: set up environment

- Find somewhere quiet
- Eliminate glare
- Good illumination
- Minimise clutter
Testing vision: which test?

- Aim to measure what child can see, not how well they know letters
- Start with formal tests (Lea charts), then progress to informal if you can’t get a result.
Testing vision for eligibility

• We check binocular vision first, then monocular using a patch/specs
• Covering with hand is fine, but no cheating!
Suggested test order

Lea shapes/Numbers/letters
100’s and 1000’s!
Stycar balls
Red/yellow sponge ball
Mirror
Light and sound toy
Points to cover

• Low vision “kit” for AVT’s
• **Electronic options**
• Loan Equipment
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• Importance of Sunspects
ipad Apps

• Many!
• Not many comply with recommendations made by National Eye Institute (USA) and International Council of Ophthalmology
• Apps unregulated, even the medical ones
• Most untested
Are they all bad?
Fast Acuity XL

- Both free and $50 version comply with National Eye Institute and International Council of Opthalmology
- Has been tested!
How did it fare?

- Issues with glare.
- Once anti-glare screen fitted, it was equivalent to ETDRS chart – “gold standard”
- Nb. Tested on adults
- Eye disease, and vision worse than 6/60 excluded.
- Can we use it? – yes!
FastAcuity XL

- Go to app store
- Download free version
FastAcuity XL

• Buy the “PRO” value pack for $7.50 this gives access to the paediatric optotypes and the metric units (6 fractions)
Settings

• Acuity unit: meter
• Optotypes: kids/numbers/Sloan
• Appearance options: leave
• Metric distance: ON
Charts – Lea/Patty pics
Charts - Numbers
Charts - Sloan
Using chart

• Need to use an anti-glare cover
• Use at 3m – move closer if needed.
• Set bottom bar to the correct distance
• Use the side bar to scroll down
Using chart
Points to cover

- Low vision “kit” for AVT’s
- Electronic options

**Loan Equipment**

- Specialised Spectacle Suppliers
- Importance of Sunspects
Loan Equipment

Dome and bar bright field magnifier
Loan Equipment

Macrolux magnifier
Loan equipment sources - magnifiers

- European eyeware – yellow pages
- Queensland Blind Association
- Vision Australia
- Internet companies
Magnifiers – cheap vs branded

• Eschenbach best quality
• Cheaper magnifiers offer poorer optics, smaller field of views, shorter life
• VA and QBA sell both, but best to discuss this with us if you want a particular one
• Maybe Eschenbach for main, but cheaper ones to have around?
Loan Equipment

Binoculars and monoculars
Binoculars and monoculars

- compact 8 x 21 monocular and binoculars
- Short focus monoculars are good – focus to 1m
- Quality issues as for magnifiers: Eschenbach products will give superior optics and FOV, but are significantly more expensive.
Loan equipment – binoculars/monoculars

• European eyeware
• Royal Society for the Blind South Australia: short focus monocular 8x21 – contact the shop.
• Dick Smiths
• Harvey Norman
• Online
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Frames for special needs

• These are available
• Might have to hunt!
• Attempting to get a network of Optoms
• Supply details for willing Optoms available online/PLVC
Frames for special needs

- Miraflex
- Como
- Erin’s World

Image courtesy of Miraflex
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• Importance of Sunspects
Sunspecs for children
Sunspects for children: why?

Evidence strongly suggesting that ocular sun damage is present in children as young as 9 years old.

• Anterior eye – pinguecula & pterygium
• Lens – cataract
• Retina – macular damage?

• Sunspects are part of the “Sunsmart” recommendations.
Why sunspecs

Images taken from Clinical Ophthalmology textbook by Jack J. Kanski
Why Sunspecs?

Images taken from Clinical Ophthalmology textbook by Jack J. Kanski
Sunspecs for kids

- Babybanz/Kidsbanz

Image courtesy of BabyBanz AU
Which sunspecs

• DON’T need to be expensive
• DO need to comply with AS/NZ 1067
• DO need to fit well – look for wraparound
Which sunspecs
Questions?
Thank You!