

## **Comprehensive Assessment**

### **Identifying Data**

Eric is a six-year-old boy born September 14, 2015. He lives with his parents, Mackenzie (his mother) and John (his father), at 1325 Waterfront Avenue, Winnipeg, MB, R3C 5M8. Their phone number at home is (204) 123-4567. Eric is currently in first grade at Chancellor Elementary School, and his classroom teacher is Ms. Aline Molina. The different testing occurred at different periods. Between December, 13, 2021 and December 17, 2021 for the functional vision assessment (FVA), and between January 31, 2022 and February 2, 2022 for the learning media assessment (LMA). The various testings were performed by Guillaume Seraglini. By the time of the testing, the chronological age of Eric was 6 years, 2 months and 29 days. The report was made on February 18, 2022.

### **Purpose**

Eric was referred by his parents as they are very concerned about his lack of reading progress. Eric's classroom teacher is also concerned about his ability to follow and participate in classroom activities. Within the last 4 months he has slipped behind the rest of the students.

### **Background Information**

Eric is a six-year-old boy with a severe visual impairment as a result of a congenital glaucoma. Eric's glaucoma was diagnosed at the age of 3. A surgery was performed on Eric, quickly after, and tubes were inserted in each eye to facilitate drainage. Unfortunately, following the surgery, Eric developed amblyopia and a retinal detachment in his left eye, as well as reduced visual acuity and visual field in his right eye. His vision is now stable. He is under medical care and takes medication to control his glaucoma. Eric wears prescribed glasses to add protection to his eyes as they do not increase his visual acuity. Eric appears to be a bright, inquisitive child. He is very verbal, and likes to tell and act out stories. He also loves to play with his older, 10-year-old brother, but became very frustrated with ball sports. Eric did his preschool and Kindergarten in a private school, but did not receive any early intervention services. Since September, he entered first grade in the public school system.

### **Assessments**

This comprehensive assessment incorporated a functional vision assessment, a learning media assessment and an expanded core curriculum. This comprehensive

assessment began on Monday December 13, 2021 and concluded on Friday December 17, 2021. At the time of the testings, Eric's chronological age was 6 years, 2 months, and 29 days. Throughout the entire assessment, Eric wore his glasses, although they are mostly protective.

### **Assessment Tools**

For the assessment, various tools were used: distance measuring device, lighting measuring device, text chart, tablet, classroom and school materials, white board, markers, books, worksheets and picture books.

## **Functional Vision Assessment**

A functional vision assessment determines how Eric best uses his vision in different environments. This section also includes a summary of his most recent clinical assessment report.

### **Clinical Assessment Results**

Eric's most recent ophthalmic report was made on July 2, 2021 by Dr. J. Smith, M.D. During this clinical appointment, Eric's best-corrected distance visual acuity was determined to be 20/400 in his right eye. In his left eye, Eric only has light perception. Eric has a reduced visual field of 45 degrees in his right eye. It means that when looking straight ahead, he does not see objects or persons that are on his peripheral (on both sides), as well as obstacles on the floor. Eric wears prescribed glasses to protect his eyes, but they do not increase his visual acuity. Eric has photophobia, which means that he is extremely sensitive to bright light, and should always wear sunglasses whenever he is outside to protect his retina.

### **Functional Vision Assessment Results**

Independent assessments on various tasks were administered to evaluate Eric's visual functioning. An assessment focused on his functional visual acuity, and another focused on his functional visual field.

### ***Functional Visual Acuity Results***

Eric was assessed with three different tasks to evaluate his abilities to perform near and distance academic activities. Those tasks took place in Eric's classroom. Light in the classroom came from overhead lighting, and from windows located on the right side of the room. The first task was to assess Eric's distance functional visual acuity. When standing in the middle of the classroom, in front of the white board, at a distance of 10 feet, Eric was not able to see the 5 inches tall black letters written with a black marker. At a distance of 5 feet (the distance between his desk and the white board), Eric was still not able to see the letters. At a distance of 3 feet, Eric started to see shapes on the white board (more like dust) but was not able to see what was written. At a distance of 1 foot, Eric recognized letters, and was able to read his name on the white board.

The second task was to assess Eric's near functional visual acuity. When seated at his desk with a book placed on it, Eric was aware of the book being placed in front of him on his desk, at a distance of 1 foot. This book presented a page with short words, with a font size of 20 points (0.27 inch). At a distance of 4 inches from the book, Eric was able to see shapes on the page, but had difficulty discerning the shapes of each letter and word. During the task, the lighting in the room remained unchanged.

The third task was to evaluate Eric's appropriate reading text size. The text size that Eric was able to read at near. Eric was presented with a chart with letters on it, at a distance of 4 inches. Starting with a letter size of 11 inches and going down until Eric was unable to read letters. At a distance of 4 inches, the smallest size of letters that Eric was able to read were 2 inches tall.

### ***Functional Visual Field Results***

Eric was assessed with three different tasks to evaluate his functional visual field. The first task was performed in different environments around the school, and in various lighting conditions. When navigating inside the classroom, Eric sometimes bumped into students and desks located on his left side. When walking in corridors, Eric bumped into students coming mostly on his left side.

The second task was to evaluate Eric's functional visual field for near tasks. This task took place in the classroom, at Eric's desk. When presented with pictures from a picture book, Eric described each picture but sometimes missed important information from the periphery. He successfully described the central part of each picture, but sometimes neglected information from the periphery, mostly on the left side.

The third task was performed in a school corridor. When standing and looking straight ahead at a person in front of him, at 10 feet, Eric was unable to detect a person passing by his right side until the person was at a distance of 5 feet. On his left side, Eric was unable to detect a person passing by, until the person was at a distance of 9 feet, in his central vision. Because Eric's left eye only has light perception, the person needed to enter his right eye visual field to be detected.

Through these tasks, it appeared that lighting may have a part to play on the results. Eric appeared to see best in well-lit areas. He presented greater difficulties in areas of the school where lighting was dimmer.

## **Learning Media Assessment**

A learning media assessment was performed to determine what type of media Eric will use to access classroom contents and academic materials. This assessment evaluated Eric's primary and secondary learning sensory channels (visual, auditory or tactual).

### **Learning Media Assessment Results**

This assessment was based on various observations that took place in the classroom, at different times of the day, during classroom activities and free-time.

Those observations were recorded on the appropriate learning media assessment forms.

### ***Sensory Channels (Form 2)***

To evaluate Eric's sensory channels, a series of twelve observations were made. Based on these observations, it appeared that Eric used his vision as his primary sensory channel, and his tactual as his secondary sensory channel. Eric used his vision to locate his coat and to recognize objects. When the teacher gave him printed texts or picture books, Eric brought them closer to his eyes to be able to see them. He used his vision to select a crayon. It appeared that Eric used his tactual to reach for objects or materials in his desk, and to unzip his book bag independently. He seemed that Eric used his auditory to discriminate sounds and locate people.

### ***General Learning Media (Form 3)***

This form provided additional information about the sensory channels that Eric used to access distance and near environmental information materials found in the classroom. For distance information, Eric used both his visual and auditory sensory channels to access information in the classroom. Based on previous observations, Eric needed to be at a distance less than 5 feet to be able to see the elements in the environment. For accessing information materials at near, Eric used both his visual and tactual senses. When need, Eric also used his auditory sensory channel to obtain additional information from the environment.

### ***Indicators of Readiness (Form 4)***

Eric is in first grade and he is starting to have contact with literacy. Based on the observations made, Eric was able to tell stories and act, to listen to others, and to speak in connected sentences. He demonstrated interest in pictures, objects, drawing, and scribbling. He was able to discriminate sounds and objects, to recognize names and simple words, and said the alphabet. Thus, at this point, Eric showed indicators of readiness to start a conventional literacy program.

### ***Initial Selection of Literacy Medium (Form 5)***

When Eric looked at picture books, he needed to be at a distance of 4 inches from the book to be able to see the pictures. At this distance, he was only able to describe simple pictures, and these pictures had to have high contrast. Additionally, sometimes, he did not seem to look at the entire picture and missed important information. When he read text at a font size of 20 points, he had difficulty discerning the shapes of the letters or words, and read. Eric could read simple words (about 5 letters long) but the letters needed to be about 2 inches tall and bold. Eric read slowly and at a pre-primer reading level. In order to be able to read words, those words had to be isolated from each other. When he wrote, Eric was at a distance of 4 inches. He had to use a marker to be able to see. When writing, the letters were about 1.5 and 2 inches tall. They were a mix of upper and lower case letters. While Eric wrote, he was unable to stay on the line. Eric was able to identify objects about 1/4 foot tall at 4 inches. To be able to see classroom materials from distance, Eric had to be at less than 5 feet from the objects, more between 1 and 3 feet.

***Continuing Assessment of Literacy Media (Form 6)***

Eric was presented with informal texts from books and formal texts from classroom textbooks. Eric was reading at an average of 35 words per minutes. He was mostly able to comprehend texts but sometimes missed important information. Eric experienced difficulty for decoding longer words (more than 5 letters) and he got quickly frustrated if stuck on a word for more than 5 seconds. Eric had difficulty accomplishing academic tasks during classroom activities, even with more time than the rest of the students in the class. When writing, Eric used a mix of lower and upper case letters, measuring between 1.5 and 2 inches tall, and had often difficulty reading back his handwriting.

***Assistive Technology and Literacy Tools (Form 7)***

Based on the observations made, it appeared that Eric would benefit from the use of literacy tools to help him in the classroom today and in the future. Eric is currently using markers, bold lined papers and a dome magnifier. He would also benefit from a reading stand for reading or looking at picture books, a writing guide to help him stay on the line, and an abacus for mathematics. The use of a video magnifier, a tablet and a task lighting would also be beneficial for Eric.

**Expanded Core Curriculum Assessment**

The Expanded Core Curriculum was performed on Thursday, February 3, 2022. It is a set of nine areas in which students with visual impairments need additional support compared to their peers because they lack the necessary visual experiences (compared to their peers). The tool used is the Expanded Core Curriculum Screening Interview Tool, which was developed by Wendy Sapp & Iowa ECC Resource Team and revised by Karen Blankenship (2011).

**Expanded Core Curriculum Assessment Results**

The assessment was composed of observations of Eric, and interview feedback from his parents and his classroom teacher.

Eric will benefit needs from the following areas.

**\* Compensatory and Access**

- \* Handwriting
- \* Braille Reading
- \* Braille Writing
- \* Nemeth Code
- \* Slate and Stylus
- \* Abacus
- \* Effective use of optical devices

**\* Career Education**

- \* Initiates & completes school assignments on time

- \* Demonstrates concern for quality of work
- \* **Independent Living Skills**
  - \* Dressing and clothing management
  - \* Eating and food management
- \* **Orientation and Mobility**
  - \* Protective Techniques
  - \* Sighted Guide
  - \* Trailing
  - \* Search Patterns
  - \* Cane
  - \* Independent travel in familiar environments
- \* **Recreation and Leisure**
  - \* Physical Games & Sports
- \* **Sensory Efficiency**
  - \* Demonstrates efficiency with prescribed optical devices
  - \* Demonstrates fluency with optical devices
  - \* Interprets graphic information
  - \* Skills for using taped materials
- \* **Social Interaction**
  - \* Non-verbal communication

Eric demonstrated strength from the following areas.

- \* **Compensatory and Access**
  - \* Communication & Type
  - \* Tactual Readiness
  - \* Listening skills
  - \* Organization
- \* **Career Education**
  - \* Follows simple and complex classrooms and school rules
- \* **Independent Living Skills**
  - \* Personal Hygiene and grooming
  - \* Time concepts
- \* **Orientation and Mobility**
  - \* Concept development
  - \* Body image
- \* **Recreation and Leisure**
  - \* Solitary play and leisure activities
  - \* Music and Dance
  - \* Arts and Crafts
  - \* Drama
- \* **Sensory Efficiency**
  - \* Initiatives independent use of optical devices
  - \* Auditory discrimination
  - \* Auditory association
  - \* Short term memory

- \* Long term memory
- \* Listening for meaning
- \* Explores tactually
- \* Recognizes tactile characteristics of objects
- \* Interprets tactile stimuli
- \* Olfactory
- \* Gustatory
- \* Kinesthetic
- \* **Social Interaction**
  - \* Interaction with family, peers and others
  - \* Courteous behaviour
  - \* Personal and civic responsibility
  - \* Recognition and expression of emotions

## **Summary**

Eric was assessed for a functional vision assessment between Monday, December 13, 2021 and Friday, December 17, 2021. He was assessed for a learning media assessment between Monday, January 31, 2022 and Thursday, February 3, 2022, due to the winter holidays, and he was assessed for the Expanded Core Curriculum on Thursday, February 3, 2022. The functional vision assessment and the learning media assessment results are summarized below.

**Functional Vision Assessment Results:** Eric was able to read 5 inches tall letters on the white board at a distance of 1 foot. Eric was not able to read texts from books with a font size of 20 points. He was able to read texts when the size of the letters were about 2 inches tall and at a distance of 4 inches from his eyes. He was able to described pictures from his picture books, at a distance of 4 inches, when they are simple and high contrast. Eric presented a reduced visual field. When looking at pictures, he sometimes missed important information, especially on the left side. When navigating in the classroom or in the school, he also sometimes bumped into people or desks on his left side. Eric used his central vision, and appeared to only see things that were in front of him and not in his periphery. During the assessment it seemed that lighting had play an important role. It appeared that Eric best sees in well-lit environments.

**Learning Media Assessment Results:** Eric used his vision as his primary sensory channel, and he used his tactual as his secondary sensory channel. To access distance information in his environment, Eric used his visual and auditory sensory channels. To identify an object in the classroom, he had to be at a distance less than 5 feet, between 1 and 3 feet for best recognition. Eric was able to recognize sounds and voices. To access near information, Eric used his visual and tactual sensory channels. He used both senses to explore objects. He used his tactual sensory channel to reach for objects. He was able to identify objects that were 1/4 foot tall at a distance of 4 inches. At that same distance he was able to read simple words that were 2 inches tall, and to describe pictures from his picture books. Eric read slowly at an average rate of 35 words per minutes. He read at a pre-primer reading level, and he was at an

instructional level for comprehension. He was able to read short words that were about 5 letters long, if they were isolated from each others. He had difficulty for reading longer words, as well as for accomplishing academic tasks with more time. His handwriting is a mix of upper and lower case letters that were between 1.5 and 2 inches tall. Eric often had difficulty reading back what he wrote. However, Eric showed indicators of readiness for a conventional literacy program. In the classroom, Eric used independently the following literacy tools, markers, bold lined papers, and a dome magnifier. He would greatly benefit from other optic, non-optical and technology tools.

Expanded Core Curriculum Results: Eric will need instruction on the following critical areas. In Compensatory and Access, Eric will benefits from handwriting, braille instruction (reading and writing), slate and stylus, Nemeth code and abacus. Eric will benefits from training in using optical and non-optical devices, and becoming more efficient. In Orientation and Mobility, Eric will need instruction in protective techniques, trailing, search patterns, cane skills, sighted guide and independent travel in familiar environments. Finally, in Sensory Efficiency, Etc will benefits from interpreting graphic information.

## **Recommandations**

For the school: As Eric did not receive any services at that time. It appeared that further evaluations would be necessary. Eric should get a low vision evaluation and an assistive technology evaluation to identify more precisely his needs and the tools that would be most appropriate for him. An orientation and mobility evaluation would also be recommended for Eric for safely navigate around the school, as he sometimes bumped into people and equipments. To accompany him in his academic progress, an individualized education program (IEP) should be created. Based on the assessments results, braille instruction should be provided to Eric, and a paraprofessional should work with him 1 or 2 hours per day.

For the classroom teacher: Eric's desk should be placed closer to the white board, if possible. Eric should be allowed to stand and go to the white board to be able to read what is written on it. The windows in the classroom are located on the right side. Thus, Eric's desk should rather be placed on the left side of the classroom, to avoid glare and brightness, due to Eric's photophobia. Eric's desk should also be placed on the left side, as he is only able to use his right eye to see. It should offer Eric to access more classroom information. The teacher should provide Eric with large print materials and pictures with high contrast. Classroom activities should take place in a well-lit area of the class. For classroom activities or circle time, Eric should have an individual white board that he could bring closer to his eyes. The teacher should provide word cards, for word learning activities, with large print words measuring 2 inches tall, that Eric would be able to hold in front of his eyes. Braille materials and instruction should take place in the classroom.

For the parents: Eric should practice braille 30 minutes everyday at home. To avoid Eric to miss steps or trips on changes in flooring, and allow him to walk without holding his parents hands, Eric's parents should encourage him to use his mobility equipments as often as possible at home and in the community. Toys should be



presented to Eric at a distance less than 3 feet, in front of his eyes or on his right side. Avoid presenting toys or passing him on his left side.

## **References**

Cleveland, J., Grimmatt, E., Lindsey-Ramirez, L., McGrath, J. & Sewell, D. (2018). *Essential Tools of the Trade: A "How To" Guide for Completing Functional Vision, Learning Media, and Core Curriculum Evaluations*. Austin, TX. TSBVI.

Holbrook, M. C. & Koenig, A. J. (1995). *Learning Media Assessment*. (2nd ed.). Austin, TX. TSBVI.