See it Find it Use it





Activity cards for understanding the visual needs of children with Cerebral Visual Impairment (CVI)



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The what and why of CVI...

If you are reading this, it is probably safe to assume that you are working with, or have an interest in Cerebral Visual Impairment. Let's start at the beginning (always a good place to begin) and consider what CVI means.

When I talk to teachers about CVI, it is very common to hear a variation of the phrase 'She/he can see a crumb from across the classroom'. Now, this is an incredibly important observation, but it suggests that we need a broader understanding of vision. For many people, when we hear 'visual impairment' we might think of blurry vision- and for some people this is the case. But, vision is much more complex.

Reflection...
When you hear 'visual impairment, is this what you think of?

Although the image above is blurred, you probably know that this is an Elmo toy, if you look at the image tomorrow- you will probably still know that this is an Elmo toy. If you saw this image in a noisy and busy place, the chances are you would be able to identify it. If you wanted to, I bet you could look at this image for a long time and, if you really wanted to, you could reach out and touch it with great precision. If the Elmo started to move, your eyes would smoothly follow it around the page and, if it was hidden in a busy picture, you would still find it! All of these things relate to how vision is processed in our brain.

CVI means that for some children, the things that we often do without a second thought are incredibly challenging. So, although we might know that a child can see a crumb from across the classroom- there is a lot more that we need to find out!





When you read about CVI, you will not get very far without being reminded that CVI is a **very** complex condition. I do not think we need to overcomplicate matters- in fact, our mission is actually very simple. These cards are a tool to help you understand your VIP's visual strengths and difficulties so you can help make things easier to see. That's it! All you need is some time, a curious mind (and some light up objects might come in handy). We are going to look for patterns in the three areas listed below...



See it

What is your VIP able to see?



Find it

How does your VIP use their vision to find things?



Use it

How does your VIP use their vision to learn?

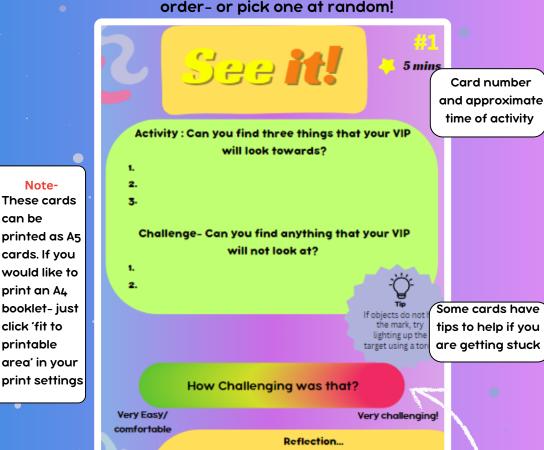
Bringing it all together

An important but often difficult part of this process is being able to communicate what you know with other people. The final cards have some ideas to help you share what you know quickly and effectively



How to use these cards...

You can use these cards however you like, go through them in order- or pick one at random!



Does this tell you anything new? Any patterns?

Record what you have seen

Note-These cards

printed as A5

cards. If you would like to

print an A4 booklet-just

click 'fit to

printable

area' in your

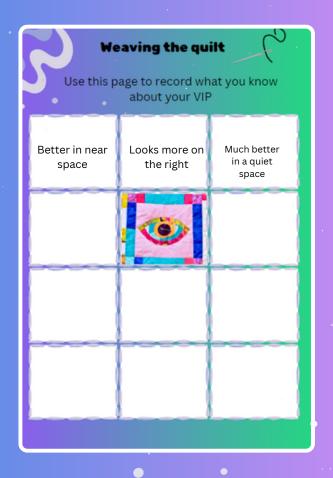
can be

Challenge Meter:

You can draw a line from your notes to this meter to show how challenging this was for your VIP. If they can do the activity immediately and consistently- you could match this to the green end. If the response was delayed and inconsistent, it might be closer to red.

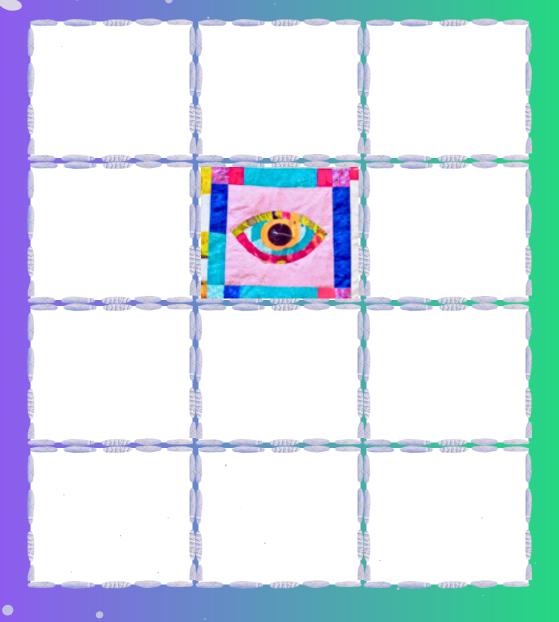
The patchwork quilt...

It might be useful to think of CVI as a patchwork quilt, with each child having a unique combination of visual strengths and difficulties. If you were weaving a CVI quilt to represent your VIP- what would it look like? When you find something out about your VIP (either a strength or area of need) make a note of it on the quilt template. This is a useful summary of your child's individual needs. We can then use this to make things easier to see. Below is an example, but the quilt is individual- do whatever you like to represent the child's vision.





Use this page to record what you know about your VIP



Each card in this section will tell you something about how and what your VIP sees. Remember, even no response tells you something useful. We can use this information to make things Easier to See and to make looking as comfortable as possible.

Outcomes

By completing this section you will have a better understanding of:

- 1. Whether lighting helps
- 2. Potential issues with complexity
- 3. What type of object your VIP will look at
- 4. What distance you VIP is able to view
- 5. How long your VIP can maintain visual attention

Question- How does your VIP respond to lights being turned off/on?

Activity: For this activity, all you need is a room with an overhead light/s.

- 1. Observe your VIP for a few minutes and note how they are currently behaving (eye movements, body movements, vocalisation etc)
- 2. Turn off the overhead lights- do you see any change in behaviour?
- 3. Turn the lights back on- any change?

How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...



10-15 mins

Question- How does your VIP respond to reflected light?

Activity: For this activity, you will need a standard torch and some reflective objects (survival blankets, tinsel, discoballs etc.).

- 1. In a quiet space, observe how your VIP responds to the objects
- 2. Turn off the lights and spotlight the object with the torch
- 3. Does your VIP respond differently? Does this help with visual attention?



How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...





Question – Does spotlighting with a torch help with visual attention?

Activity: For this activity, you will need a standard torch and some bright objects.

- 1. In a quiet space, observe how your VIP responds to the objects
- 2. Turn off the lights and spotlight the object with the torch
- 3. Does your VIP respond differently? Does this help with visual attention?









How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...



10-15 mins

Question – Does red light help with visual attention?

Activity: For this activity, you will need a red torch and some bright objects (preferably something bright red)

- 1. In a quiet space, observe how your VIP responds to the objects
- 2. Turn off the lights and spotlight the object with a red torch
- 3. Does your VIP respond differently? Does this help with visual attention?









How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...

/- 10 mins

4

Question- Will your VIP look at objects?

Activity: Can you find three things that your VIP

will look towards?

- 1.
- 2.
- 3.

Challenge- Can you find anything that your VIP will not look at?

1.

2.

Tip

If objects do not hit
the mark, try
lighting up the
target using a torch

How Challenging was that?

Very Easy/
comfortable

Very challenging!

Simoriable

Reflection...

Question- What distance is your VIP able to maintain attention?

Activity: Using one of the objects from card 1, what distance will your VIP maintain gaze?



Challenge: Does the background make a difference? Can your VIP maintain gaze at a distance against a clear background?

How Challenging was that?

Very Easy/ comfortable

Very challenging!

Reflection...





Question: What distance is your VIP able to maintain attention?

Activity: For this activity, you will need a small handheld mirror.

1. Attract visual attention- will your VIP look at themself in the mirror?

2. Slowly move backwards, at what distance will your VIP lose interest?



Shining a pen torch across the mirror may help gain visual attention

How Challenging was that?

Very Easy/ comfortable

Very challenging!

Reflection...







Question– What happens when there is lots to look at?

Activity: For this activity, you will need a variety of objects (you may include motivating objects that your VIP likes)

- 1. Will your VIP look at objects when there is a lot to view?
- 2.1s the response the same as when presenting one thing at a time?

Challenge- What happens if the objects are placed on a patterned/complex background?

How Challenging was that?

Very Easy/ comfortable

Very challenging!

Reflection...







Question- What happens when your VIP is in a busy environment?

Do this one at a busy time of day i.e. when there is a lot of noise/ movement

- 1. Will your VIP look at objects when there is a lot of competing sensory information?
- 2. Is your VIP able to look for the same amount of time or are they avoiding looking more?

Challenge- Take your VIP to a quiet environment, are the visual responses the same?

How Challenging was that?

Very Easy/

Very challenging!

Reflection...





Question- Does your VIP respond better when using a 'vision box'?

For this activity, you will need a plain black fabric storage box. Many shops such as Ikea sell these for around £3.

- 1. Present an object of interest to your VIP and observe the response
- 2. Lay the vision box on its side and place the object inside. Is the response any better? If so, this may be due to the high contrast and lower complexity (you are blocking out the room).

How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...



Find it!

Each card in this section will tell you something about how your VIP uses their vision to find things. Remember, even no response tells you something useful. We can use this information to make things Easier to See and to make looking as comfortable as possible

Outcomes

By completing this section you will have a better understanding of:

- 1. The best position to present objects
- 2. Whether movement is helpful or distracting
- 3. Your VIPs ability to follow a moving object
- 4. How your VIP uses visually guided reach
- 5. Whether there is any delay between looking and responding

Question: Does your VIP respond better on a particular side?

Activity: Using the diagram below, note areas of the visual field where your VIP responds. Are there areas that your VIP responds slower/ does not respond?

Note: The diagram represents the VIP facing you



How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...

Question: Does your VIP reach better on a particular side?

Activity: Using the diagram below, note areas of the visual field where your VIP will reach. Is the response immediate or delayed (if so, how long?) is this the same in all areas? Does your VIP look at the same time as reaching?

Note: The diagram represents the VIP facing you

Right side Left side

How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...

Question: Can your VIP follow an object across their midline?

Activity: Using an object from card 1, when you have visual attention move the object across your VIP's midline.

- 1. Can your VIP follow the object across from right to left and back again?
- 2.Can you describe how the eyes move? Is it smooth, do the eyes tick along? Do they look away and then look back?
- 3. How about up and down?

How Challenging was that?

Very Easy/ comfortable

Very challenging!

Reflection...

10 mins

Question: Is your VIP able to alternate their attention between two objects?

Activity: For this activity you will need two stimulating objects. It is best to be seated in front of your VIP

- Introduce an object from the side and wait until the child responds (use movement as necessary)
- 2. When the child attends to the first object, introduce the second from the other side
- 3. Does your VIP look towards the new object?
- 4. Can you get your VIP to look at one and then the other?

How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...

Question: Does your VIP respond immediately or is there some delay?

Activity: For this activity, you will need a selection of motivating object

- 1.Introduce an object from the side and note how long it takes for your VIP to respond- is it an immediate response? Does it take a few seconds? a minute?
- 2.Is the response time consistent in other areas of the visual field?

How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...

Use it!

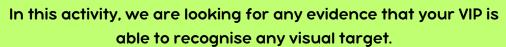
Each card in this section will help you explore your VIP's ability to use and apply their vision. We can use this information to make sure that learning opportunities are relevant, accessible and within the child's visual abilities.

Outcomes

By completing this section you will have a better understanding of:

- 1. What visual information your VIP is able to use and make sense of
- 2. Whether your VIP is able to make visual choices
- 3. What your VIP is able to recognise

This card will require a bit of detective work (the use of a deerstalker hat and rain mac is optional)



- 1.Arrange to speak to parents/carers- does your VIP have a favourite toy at home? Does your VIP look at the TV- if so what? Does your VIP seem to visually recognise any individual?
- 2.Check some of these things, how do they respond? Is it the same response without any sound?
- 3. How about in class? Is there anything that you think your VIP recognises visually? water bottle? Spoon? toy? How do you know?

Reflection...

What did you find out? Is there a pattern?



5 mins

Activity: This is a simple activity that will help us think about what your VIP can recognise...

1. Stand directly in front of your VIP and make an exaggerated but silent smile. What happens?

2. Try waving- what happens?

"My



Would wearing bright lipstick help?

Do bright gloves make a difference?

How Challenging was that?

Very Easy/
comfortable

Very challenging!

Reflection...



Activity: This is a simple activity that will help us think about what your VIP can recognise.

Do this one at snack/lunchtime

- If you are feeding your VIP, note whether they are opening their mouth in anticipation of the spoon, or in response to a touch on the lip
- 2. Is this the same with their drink?
- 3. What are your VIP's eyes doing whilst they are eating/drinking?

How Challenging was that?

Very Easy/ comfortable

Very challenging!

Reflection...



Activity: For this activity, you will need some objects that your VIP likes and is motivated by

- Gain your VIP's attention in the object in any way that you can (sound, touch, vision). Once attention is obtained, withdraw the object slightly.
- 2. Present another object in your other hand. Is your VIP still interested in the original object?
- 3. Switch objects to the opposite hand, is your VIP still interested in the original object?
- 4. Will your VIP typically respond better to one object?

How Challenging was that?

Very Easy/ comfortable

Very challenging!

Reflection...







This section includes cards that will help you communicate your VIP's visual strengths and difficulties effectively

Outcomes

By completing this section you will be able to:

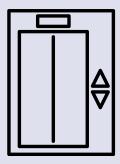
- 1. Explain your VIPs visual needs clearly and effectively
- 2.Explain what helps your VIP using three word statements



The Elevator Pitch



Question: How good are you at explaining your VIPs visual needs?



Challenge: Try to explain your VIPs visual needs to a colleague in 30 seconds

You might want to use the quilt template to help you

How Challenging was that?

Very Easy/ comfortable

Very challenging!

Reflection...

What might you do to make this easier?



Explain it like I'm 5



Question: Can you explain your VIP's visual needs without any complex terminology?



Challenge: Imagine you are explaining your VIPs visual needs to a five year old. What would you say? Try and write a simple response in under one minute

How Challenging was that?

Very Easy/ comfortable

Very challenging!

Reflection...

What might you do to make this easier?



Tell me I'm wrong

It can be helpful to be challenged on what we think we know about a VIP's visual needs



Challenge: Provide a colleague with the quilt template and ask them to tell you if they think you are wrong or right.

For example, if you think your VIP responds better on one side, do they see this too? Getting a second opinion can open up a useful discussion

How Challenging was that?

Very Easy/

Very challenging!

Reflection...

Is there anything that you might look at again? Any points of disagreement?



This activity will help you reflect on simple things we can all do to make it easier to see!

- 1. Print out the 'Hit the Mark' template on the following page
- 2.On the outside of the target, you will see ten, three word statements
- 3. Start at the top (light it up) and see if it produces a better response. If it does, you know it is hitting the mark, so give the segment a tick (or a date- whatever you think!)
- 4. Keep working around the target until you have a good idea of what strategies give a better response and which ones do not make a difference
- 5. If a strategy does not make a difference, that's fine, do not add a tick and move on.
- 6.At the end, you will have personalised three word statements for your VIP. Copy it, stick it up, spread the word!
- 7. Well done, you are hitting the mark!



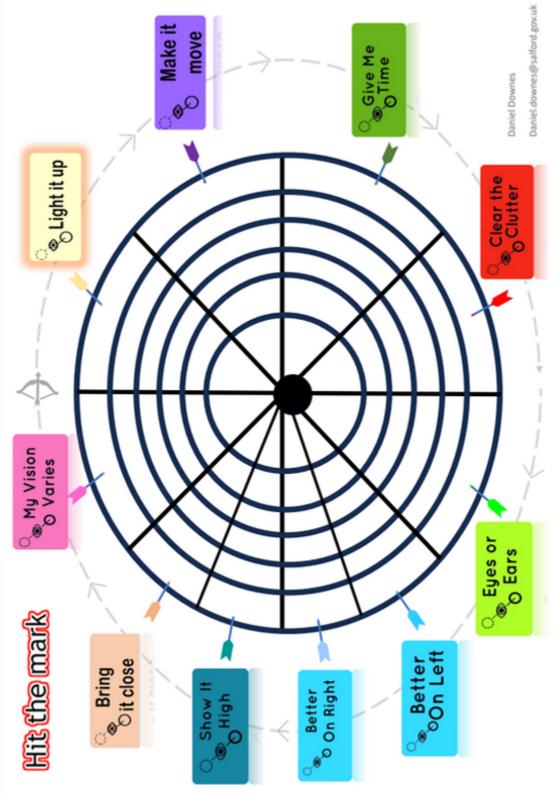
Challenge!

Why not ask parents/ other professionals to have a go. Are they seeing the same things?



If you are using an e version of this booklet the link below will take you to a video explaining the idea.

https://youtu.be/llxqY5kdl6o?si=oiClMWkDjsMuXnqy









Complete this activity once you have some information filled in on the quilt template and Hit the Mark

Now that you have some useful information, it is time to think about how you can make things Easier to See! Let's start small and think of just one thing we can do at one point of the day to make things easier. Choose one activity and look back at the patchwork quilt/Hit the Mark and add just one thing that you could do to make things easier for your VIP. When you are ready, add something else. Before you know it, you will have a full CVI timetable!

Time	Activity	One thing I can do
Example 09.00	Example Morning story	Example Reduce lighting and light up the objects with a pen torch



Getting Stuck!

If you feel that you are getting stuck, do not fear! Some children may have very limited visual responses or may not be able to use their vision effectively in all environments. At least you know something new! But, there are other things that we can try to help promote visual attention or maximise sensory engagement.

The cards in this section can be used when children display very limited levels of visual attention.

The Sensory mixing deck

Although vision is important, remember it is only one sensory channel. To maximise learning opportunities, it is essential that we have an understanding of how our students are using all of their senses.

Activity: For this activity, you will observe your VIP during different activities- perhaps aim for three 10 minute observations. Consider how engaged your VIP is when using their senses. Mark this on the next page.

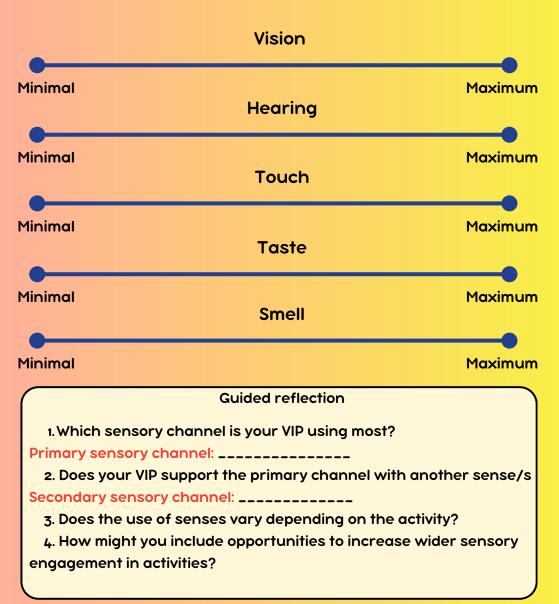
Example: In a sensory story, the VIP briefly glances at bright shiny images when held close. They respond very well to Voice intonation throughout and are encouraged to touch the fabric. No use of taste or smell is observed. See below...

Although sensory stimulation is important, use one thing at a time



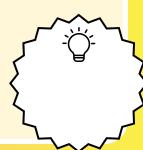


The Sensory mixing deck













Do not panic! We <u>all</u> get stuck from time to time! Remember that you are doing something very useful for your VIP, so keep going.

I hope these cards are a useful starting point, but there are lots of people and websites that can provide further information, advice and strategies.

Website	Notes	
https://makeiteasiertosee.co.uk/	Many of the ideas from these cards come from the fantastic ophthalmologist Prof. Rachel Pilling . There is lots of useful info here.	
https://cviscotland.org/	An amazing website packed with useful information on CVI! Well worth a visit	
https://cvisociety.org.uk/	A charity for raising awareness of CVI. They have an annual conference which may be helpful	
https://strategytosee.com/	Some great ideas for strategies and resources	
https://www.perkins.org/what- is-cvi/	A useful website for keeping in touch with new developments	
https://www.pathstoliteracy.org /learning-center/cvi/	Useful articles aimed at CVI and literacy in particular	

If you need any other help or support, please contact me on: daniel.downes@salford.gov.uk