Purpose
The eye-pointing classification scale is a tool to support professionals and families in describing looking behaviours related to eye-pointing in non-speaking children with cerebral palsy affecting their whole body. The scale describes looking behaviours in five levels¹.

Background
Children with cerebral palsy affecting the whole body who have little or no functional speech, and who cannot use limb movements to point or select, are often reliant on using their eyes to communicate and engage with the world.

Professionals observe children’s looking behaviour during assessment as a way of determining receptive language and cognitive abilities in this otherwise hard to assess population. Deliberate eye gaze fixations can also be used as an access method for augmentative & alternative communication (AAC).

Although the term eye-pointing is often used when describing children’s looking behaviours, there is often poor agreement between professionals concerning which looking behaviours constitute genuine eye-pointing for communication and which do not. A lack of consensus can have profound implications for clinical practice.

What is eye-pointing?
We describe eye-pointing as: “the context-relevant, controlled and intentional use of gaze in order to direct one or more partner’s visual attention to any item or object for a deliberate communicative purpose. Other communication modes (facial expression, vocalisation, head movement and body position) may be employed, as available, to support the use of gaze.” (2, pp.479)

For example, by shifting gaze between an object and a partner’s face the child might draw their partner’s attention to that object, for example to comment on it, to ask about it or to request it.

Effective and fully developed eye-pointing is an interpersonal activity, involving collaborative interaction between the child, their partner, and the environment.

When a child eye-points to an object, there may be a period of negotiation between the child and their partner concerning the intended meaning of the eye-point. Sometimes the specific context in which the child uses eye-pointing allows the partner to know the meaning of the eye-point without the need for explicit negotiation of meaning. As a consequence children’s use of eye-pointing skills may vary with context and partner.

Eye-pointing skills may be spontaneously initiated by the child or generated in response to others’ actions.

Instructions
Use the five-level scale and summary table below to classify the child’s looking behaviours in relation to eye-pointing.

Select the level that best describes the child’s typical looking behaviour during everyday activities. This approach is suggested because a number of factors can affect children’s use of looking skills (e.g. physical positioning and stability, use of medication, fatigue, general health, and presence of stimulating or motivating objects).

Classification is based purely on careful observation of the child’s specific gaze behaviours, and not on the partner’s interpretation of possible communicative function of the looking behaviours (for example, an assumption that the child is commenting or requesting).

Discuss classification with other professionals and the child’s family.

Where a child’s looking behaviours are thought to fall at the borderline between two levels of classification, the lower level representing the greater degree of limitation should be ascribed.

Project team
Michael Clarke, Gabriella Aberbach, Rosie Cooper, Gurveen Panesar, Laura McLaughlin, Jenefer Sargent, Caroline Rose, Katie Price, Tom Griffiths, Amie Woghiren, John Swettenham.

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Dr Michael Clarke
Department of Language and Cognition
Chandler House
2 Wakefield Street
London WC1N 1PF

+44(0)20 7679 4253
m.clarke@ucl.ac.uk
Eye-Pointing Classification Scale

**I USES EYE-POINTING**

*Fixes gaze on object, disengages gaze from object, shifts gaze and fixes on partner’s face, returns gaze to fix on same object and/or fixes gaze on object, disengages gaze from face, shifts gaze and fixes on object, returns gaze to fix on same partner’s face.*

Children at level I demonstrate a consistent ability to shift gaze as described in Level II. In addition, the child will then return their gaze to the original place; the partner’s face or the object.

**II SHIFTS GAZE TO FACE**

*Fixes gaze on object, disengages gaze from object, shifts gaze to partner’s face and/or fixes gaze on partner’s face, disengages gaze from face, shifts gaze to object.*

Children at level II demonstrate a consistent ability to shift gaze from the object to the partner’s face and/or from the partner’s face to an object. These actions may implicate active social engagement by the child with others, but without clear evidence of eye-pointing.

Children at level II do not typically demonstrate the ability to shift gaze from an object to a partner’s face and back to the object, or from a partner’s face to an object and back to the face (as described in level I).

**III FIXES, DISENGAGES AND SHIFTS GAZE**

*Fixes gaze on object, disengages gaze from object, shifts gaze away from object and fixes on a new object.*

Children at level III demonstrate a consistent ability to withdraw and shift gaze voluntarily and actively from an object and shift their gaze to fix gaze on a second object. Disengaging involves active non-attendance to a range of other possible stimuli. Shifting gaze may involve moving the head as required.

Children at level III are limited in their ability to shift gaze from objects to faces and/or faces to objects (as described in Level II).

**IV FIXES GAZE**

*Ability to fix and hold gaze.*

Children at level IV will demonstrate consistent active ability to fix and hold gaze on objects or faces. Control of fixation describes the active process of stabilising the fovea on a stationary target. The fovea is the part of the retina which is responsible for central, sharpest vision. Fixation ability is crucial for attention control and underpins engagement and disengagement with stimuli.

Children at level IV are limited in their ability to disengage gaze from objects or faces, shift gaze and fix on new objects (as described in level III).

**V OTHER VISUAL BEHAVIOURS**

Children at level V will not demonstrate consistent gaze fixation on objects or faces (as described in level IV), and/or their visual attention to objects or faces cannot be confidently determined. They may demonstrate the following:

- Acknowledging the presence of objects without clearly fixing gaze on them e.g. displaying excitement when a favourite pop-up toy is introduced
- Visual attention given to objects is fleeting and not repeated
## Eye-Pointing Classification Scale

### Summary Table

This summary table represents a progression of the core skills presented in the eye-pointing classification scale, which underpin and contribute to the realisation of eye-pointing.

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses eye-pointing</td>
<td>Shifts gaze to face</td>
<td>Disengages and shifts gaze</td>
<td>Fixes gaze</td>
<td>Other visual behaviours</td>
</tr>
<tr>
<td>Demonstrates Level IV and</td>
<td>Demonstrates Level IV and</td>
<td>Demonstrates Level IV and</td>
<td>Fixes gaze</td>
<td>Does not fix gaze</td>
</tr>
<tr>
<td>Demonstrates Level III and</td>
<td>Demonstrates Level III and</td>
<td>Disengages gaze from objects, shifts gaze and fixes on new objects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates Level II and</td>
<td>Shifts gaze from object to face and/or Shifts gaze from face to object</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixes gaze on object, shifts gaze to face, returns gaze to object and/or Fixes gaze on face, shifts gaze to object, returns gaze to face.</td>
<td></td>
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</tr>
</tbody>
</table>

- **E.g.** The child looks from a ball to the adult’s face.
- **Or**
  - From the adult’s face to the ball then back to the adult’s face.

- **E.g.** The child looks from a ball to a flower.

- **E.g.** The child fixes their looking at a ball.

- **E.g.** The child does not fix their looking at a ball.