



Scoring the Early Human Capability Index (eHCl) – Australia

The Australian version of the eHCl includes 60-items. Three of the items provide information on the child’s height, weight and presence of disabilities/special needs. The other 57 items are all dichotomous (Yes/No, or Can already/Can’t yet) and these items are used to create a nine scale score. The number of items within each scale ranges between 2 and 12, with an average of 6 items per scale. Most items are positively worded so that the “Yes/Can already” response is scored as 1, and the “No/Can’t yet” response is scored as 0. Non responses are coded as a 9. Five items are reverse scored and these are shown in red below.

Table 1: Scoring the nine domains of the Australia version of the eHCl

Domain	Response options	
General verbal communication	Can already	Can’t yet
Can this child communicate their needs by crying or pointing?	1	0
Can this child understand local language?	1	0
Can this child use words to get their needs met?	1	0
Can this child tell you about their day using a single word or simple sentence?	1	0
Can this child tell you about their day using multiple sentences?	1	0
Can this child take turns speaking in a conversation?	1	0
Approaches to learning	Yes	No
Does this child show more curiosity about something new in comparison to something familiar?	1	0
Does this child investigate/explore the function of a new toy/game/puzzle or object?	1	0
Does this child use objects in make-believe play?	1	0
Is this child interested in games?	1	0
When in an unfamiliar environment with a familiar person present, does this child feel free to explore?	1	0
Is this child diligent in their approach to a new job or task?	1	0
Numeracy and concepts	Can already	Can’t yet
Can this child recognise geometric shapes (e.g. triangle, circle, square)?	1	0
Can this child name and identify at least 3 colours?	1	0
Can this child sort and classify objects by common characteristics (e.g. shape, colour, size)?	1	0
Can this child name and recognise the symbol of all numbers from 1 to 10?	1	0
Can this child count to 20?	1	0
	Yes	No
Does this child know that a giraffe is taller than a cat?	1	0
Does this child know the order of the day (e.g. breakfast then lunch then dinner then sleep)?	1	0

Domain	Response options	
Does this child understand the concepts of yesterday, today and tomorrow?	1	0
Does this child have notions of weight (e.g. an elephant weighs more than a mouse)?	1	0
Does this child know that the number 8 is bigger than the number 2?	1	0
Formal literacy - reading	Can already	Can't yet
Can this child follow reading directions? (i.e. left to right, top to bottom)	1	0
Can this child identify at least 3 letters of the alphabet?	1	0
Can this child identify at least 20 letters of the alphabet?	1	0
Can this child read at least 4 simple popular words?	1	0
Can this child read complex words?	1	0
Can this child read simple sentences?	1	0
Formal literacy - writing	Can already	Can't yet
Can this child scribble on a page using a pen/pencil/crayon?	1	0
Can this child draw something identifiable (e.g. a stick person)	1	0
Can this child write at least 3 letters? (e.g. A, B, C)	1	0
Can this child write his/her name?	1	0
Can this child write simple words?	1	0
Can this child write simple sentences?	1	0
Cultural knowledge	Can already	Can't yet
Can this child identify two local animals?	1	0
Can this child identify two culturally important foods/dishes?	1	0
Can this child identify two local plants that provide food/fruits?	1	0
Can this child sing familiar children's song (e.g. Twinkle, Twinkle)?	1	0
Can this child perform prayers/cultural routines?	1	0
Social and emotional skills	Yes	No
Is this child happy to share their toys and belongings?	1	0
Does this child take care of their own things?	1	0
Does this child demonstrate respect for adults?	1	0
Does this child demonstrate respect for other children?	1	0
Does this child accept responsibility for their actions?	1	0
Is this child considerate of other people's feelings?	1	0
Is this child helpful?	1	0
Is this child friendly to other children?	1	0
Does this child kick, bite or hit adults or other children?	1	0
Is this child impatient?	1	0
Does this child understand the difference between right and wrong?	1	0
Does this child follow simple instructions on how to do something?	1	0
Perseverance	Yes	No
Does this child perform tasks independently?	1	0
Does this child keep at a task until they are finished?	1	0
Does this child need to be constantly reminded to finish something?	1	0
Does this child get easily distracted from a task?	1	0
Physical Health	Yes	No
Is this child frequently sickly?	1	0
Does this child always wash their hands after toileting?	1	0

The scale scores for each domain are calculated by taking the average score of all items within that domain. As such, all domains have scores between 0 and 1, where higher scores represent better development. Domain scores are calculated provided that no more than 20% of scores are missing (see details below).

Domains	Items per scale	Non-missing items needed to calculate scale
Physical Health	2	1
Perseverance	4	3
Social and emotional wellbeing and skills	12	9
Cultural identity and spirituality	5	4
Formal literacy - writing	6	4
Formal literacy – reading	6	4
Numeracy and concepts	10	8
Approaches to Learning	6	4
Verbal Communication	6	4

Two summary indicators can also be calculated.

1. The **Literacy/numeracy scale** is made up of the 10 items from the Numeracy and concepts scale, the 6 items in the Formal literacy (reading) scale, and the 6 items in the Formal literacy (writing) scale. The average of these 22 items is calculated provided that at least 17 items are non-missing.
2. The **overall development scale** is calculated by taking the average of the nine scale scores, provided that data is non-missing for at least seven of the scales.
 - Verbal Communication
 - Approaches to Learning
 - Numeracy and concepts
 - Formal literacy – reading
 - Formal literacy - writing
 - Cultural identity and spirituality
 - Social and emotional wellbeing and skills
 - Perseverance
 - Physical Health

Note. The current computation of scale scores and summary indicators represents a work in progress. The instrument properties are still being validated and changes may still occur as further reliability and validity studies are conducted. The development of the eHCI involves a process of continuous improvement.