

# Is baseline missing the bigger picture?

Efforts to formalise the assessment of children in the early years are doomed to failure because policymakers fail to understand the basics of brain development, argues academic **Pam Jarvis**. Here, she explores why accountability measures such as baseline testing only provide a limited snapshot of our youngest pupils' potential



As a researcher, parent and grandparent, what baffles me the most about [the 'baseline'] situation is the manner in which the current government continue to ignore the most recent neurophysiological research into human development.

As such, they seem oblivious to the problems associated with the formal testing of young children under an 'accountability' agenda, a lack of understanding which has led to their intention for England to become the only nation in the world to [apply a high-stakes 'baseline' test](#) to 4 and 5 year olds from 2020 onwards.

Pam Jarvis, March 2018



# The Developing Brain

- Synapses (pathways between neurons) formed at a great pace in the first three years (blooming)
- Synapses that are not used swiftly decay (pruning)
- Neural networks underpin 'schemas': organised clusters of ideas or 'thought hangers'
- The first seven years are about 'learning to learn'- and 'cramming' is impossible if the framework for the incoming information is absent
- Children learn best where they can freely operate on the concrete (real) world in a language-rich environment, connecting words to the world
- Purely language-based testing is highly unlikely to define what a child under seven knows and can do

<https://www.youtube.com/watch?v=kAG39jKi0II>



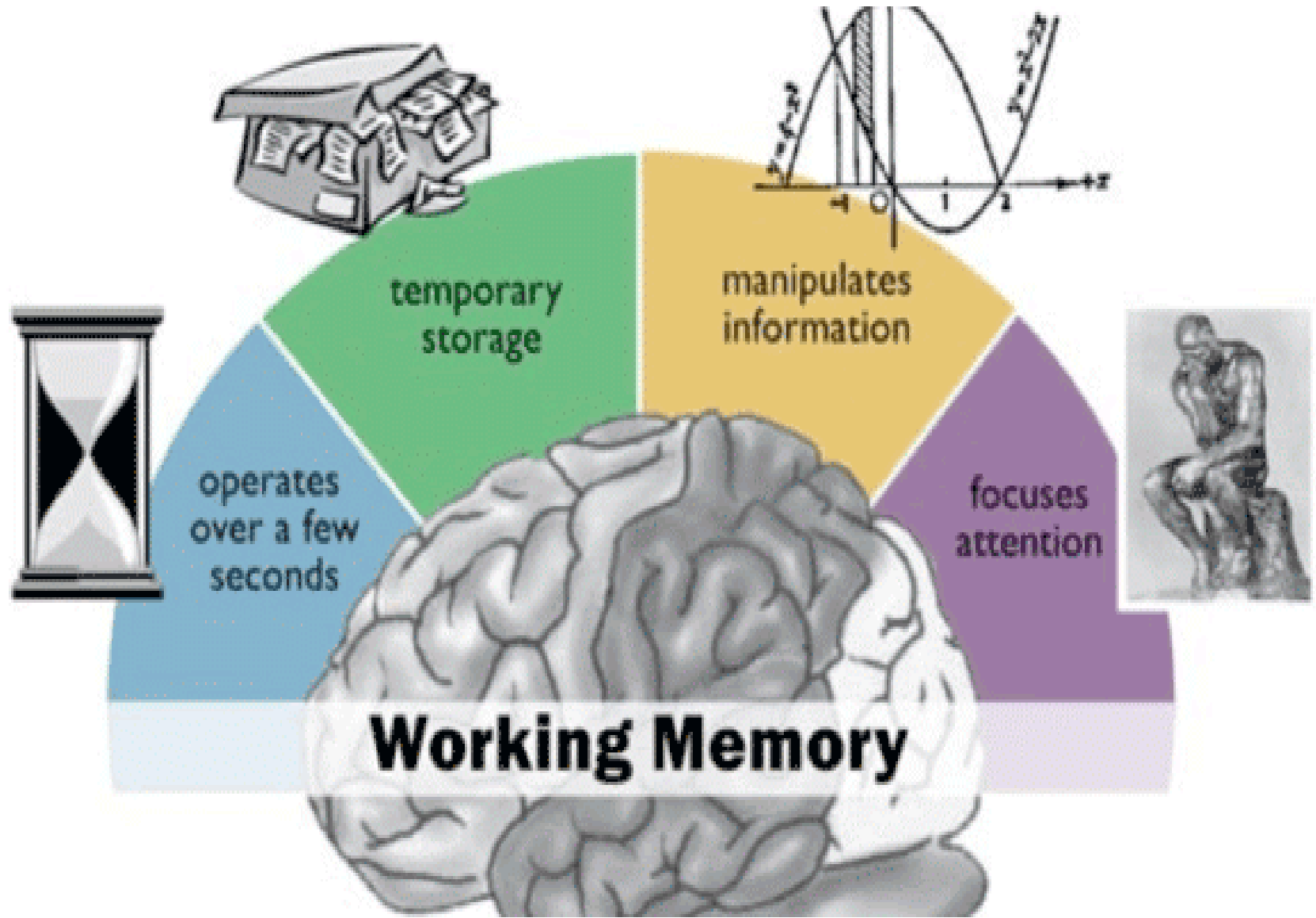
**BIRTH**



**6 YEARS**



**14 YEARS**



- At the early stages of learning, rather than relentlessly inputting adult-centric ‘stuff’ which has the tendency to become jumbled without the relevant ‘hangers’ to ‘hang’ it upon, the adult focus should be upon facilitating stimulating environments in which children can play freely, whilst engaging in associated conversation with both peers and adults.



# Desperately Seeking Schema



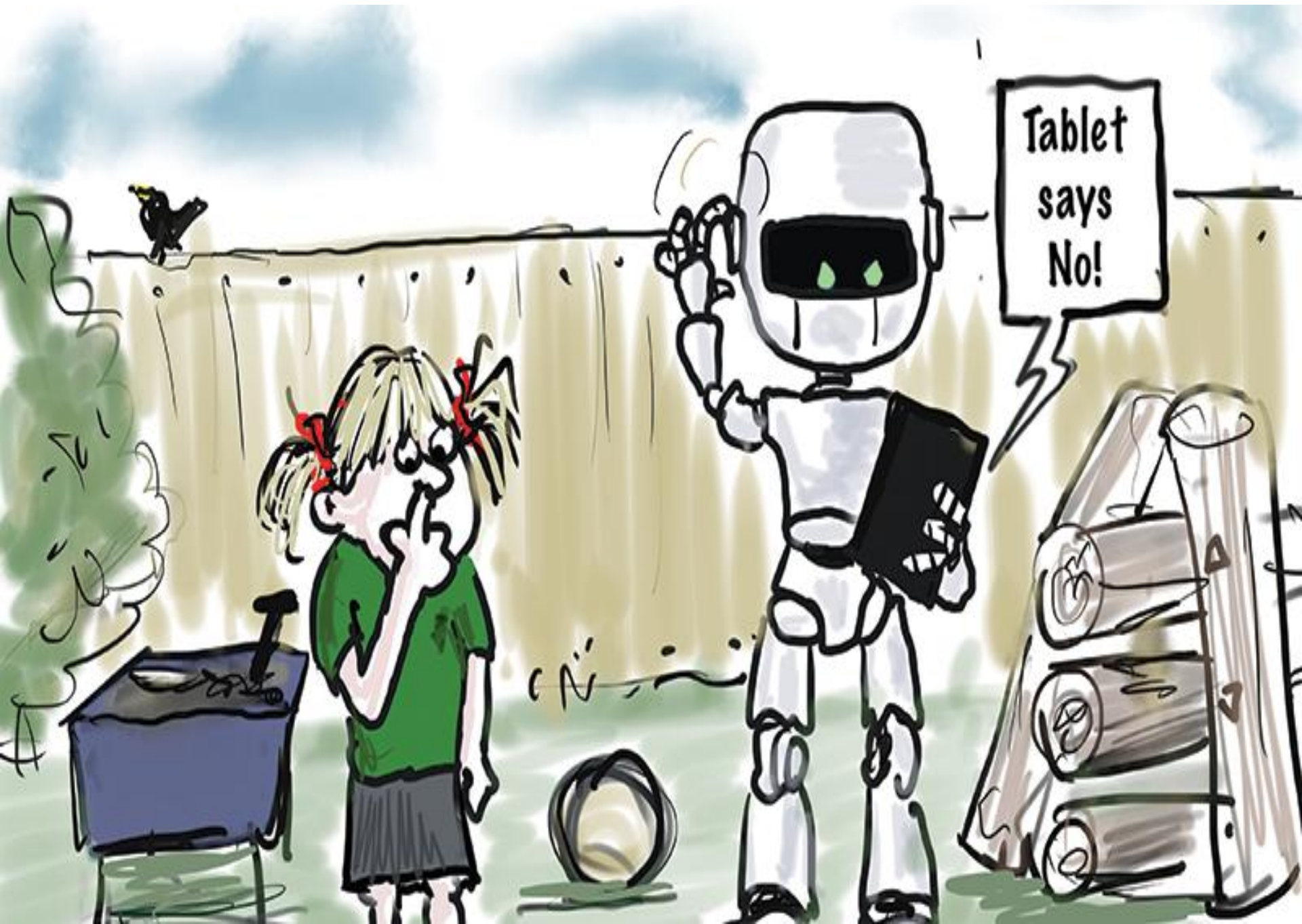
- Teaching and learning in an informal and socially embedded environment helps children to organize their understanding of the world and their place within it
- At the biological level, this supports the rich construction and coordination of neuronal connections within the brain
- As the neuronal construction program progresses, there is increasingly flexible 'disembedding' or extrapolation of ideas within more formal interactions and unfamiliar situations .





# Baseline testing is planned to:

- Collect one combined statistic intended to assess teacher and school accountability when children reach Y6...but stats indicate that teachers and heads are likely to move jobs in this time
- Rely on one trial, iPad based questioning: evokes the 'Piagetian problem'!
- Apply exactly the same test to children across the 4-5 year old age range in the first half term of Reception
- Not result in the grade generated being applied to the individual child- but do the DFE seriously think teachers/ heads will not record that information?



Tablet  
says  
No!

No

# ‘Bold Beginnings’:

- Is a clear attempt to bring formal education practices into Reception
- Fails to fully recognise the complexity of the adult role in play-based learning
- Makes no mention of the fact that 4 year olds were removed from the NC in 2000 due to general consensus that they were too young for it.
- Appears oblivious of the fact that most of the world’s children start formal schooling at 6, and some at 7.

## All primary schools should:

- make sure that the teaching of reading, including systematic synthetic phonics, is the core purpose of the Reception Year
- attach greater importance to the teaching of numbers in building children’s fluency in counting, recognising small numbers of items, comparing numbers and solving problems
- ensure that when children are learning to write, resources are suitable for their stage of development and that they are taught correct pencil grip and how to sit correctly at a table
- devote sufficient time each day to the direct teaching of reading, writing and mathematics, including frequent opportunities for children to practise and consolidate their skills
- use the EYFSP as a guide to end-of-Reception expectations rather than to define what should be taught.

# Poses huge questions for policy....

- Over-formal teaching and learning situations for children under 7 may actually obstruct learning, particularly if they set up an association of 'school' with 'overwhelmed' and 'stressed'.
- There is a generic inequality for summer birthday children in the construction that they are the peers of classmates with 20% more maturation and life experience
- 'Training to test' with children under 7 may be obstructive, for example...
  - Phonics testing at 5: does training for this test strengthen construction of vision to sound neuronal pathways while pathways dealing with meaning-making take a 'back seat'?
  - Baseline testing at 4: what the child appears to 'know' will depend heavily on how the question is linguistically/ conceptually framed; odds stacked against younger children, EAL, anyone outside white, English middle class culture

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**Sean Harford** @HarfordSean · 6h

Because a primary school shouldn't see EYFS in isolation from the rest of its curriculum. Its curriculum should be viewed as a continuum.

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**Pam Jarvis** @Dr\_Pam\_Jarvis · 6h

Do you think this is an issue going back to CGFS then; that this was a mistake, further compounded by the EYFS? Or is it the aligning of the CGFS & BT3M that is now being seen as a problem? Discussion in this frame would help place [#boldbeginnings](#) in context

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**Sean Harford** @HarfordSean · 6h

It's not as complicated as that. An 'R to Y6 school' should devise its curriculum as a continuum from when the children join the school to the point they leave. They should know why they've devised it the way they have, know how it is being implemented and what impact it has.

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**Pam Jarvis** @Dr\_Pam\_Jarvis · 6h

What I am most interested in, from my professional perspective, is how this was rationalised against empirical findings in bio-psycho developmental research as was done at the time the CGFS was created. [tackleberry.dur.ac.uk/1679/1/1679.pdf](http://tackleberry.dur.ac.uk/1679/1/1679.pdf)