THE TODDLER BRAIN

Nurturing Skills Today That Will Shape Our Children's Future…and Our Future Workforce

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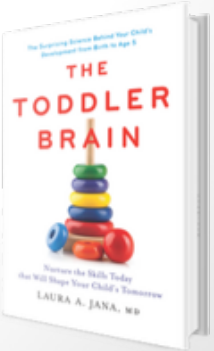
Global Business Summit on Early Childhood

Ready Nation - NYC, Nov 1-2, 2018



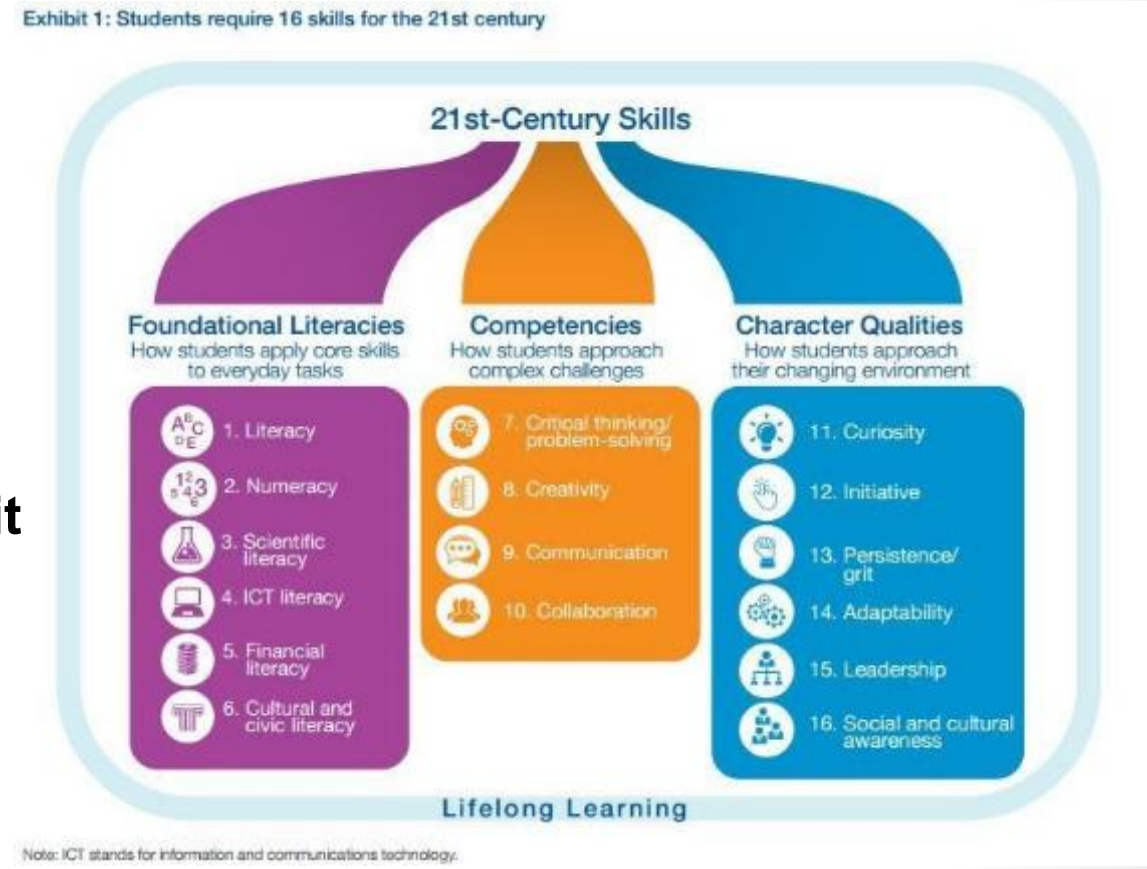
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World Economic Forum: 21st C Skills

1. **Critical thinking**
2. **Creativity**
3. **Communication**
4. **Collaboration**
5. **Curiosity**
6. **Initiative**
7. **Persistence & grit**
8. **Adaptability**
9. **Leadership**
10. **Social & cultural awareness**



New Vision for Education: Fostering Social and Emotional Learning Through Technology
World Economic Forum Report – March 10, 2016

Shifting Upstream
The Case for Investing Early

- Building & sustaining strong brains and bodies requires certain basic needs be met
  - health
  - safe environment
  - stable and responsible caregiving

- To develop strong brain architecture, babies and toddlers require **dependable interaction** with **nurturing adults** and **safe environments**



WHY EARLY

The Amazing Baby Brain

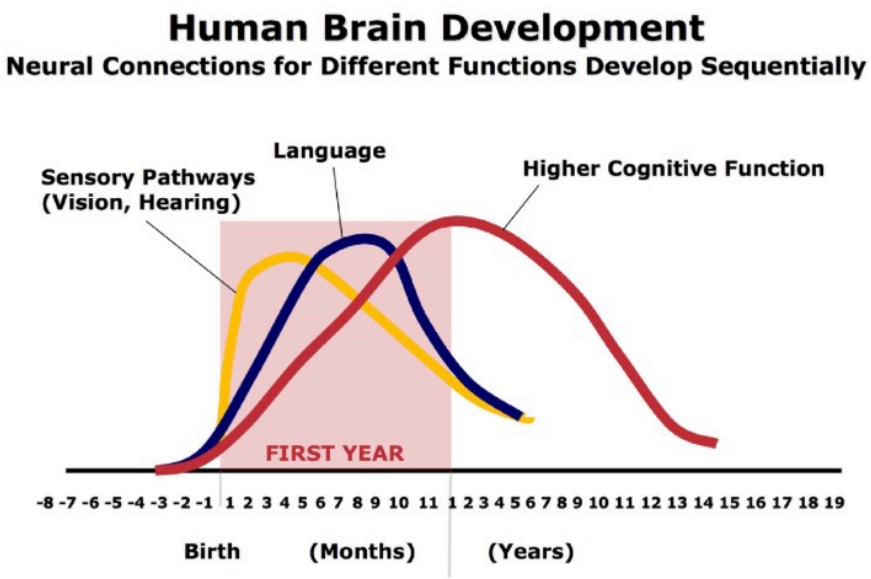


85% of brain growth in first 3 years

- Born with **~100 billion** brain cells
- Up to **1 million** new neural connections/second

- Birth: Vision/hearing
- By 1 year: Language
- By age 5: Thinking, reasoning, communicating

Center on the Developing Child
HARVARD UNIVERSITY



WHY EARLY

The Executive Function Skills

1. **Inhibitory (Impulse) control**
   - Think before acting; resist temptations, distractions and habits; prioritize actions instead of acting purely impulsively;
   - “Bite our tongues;” control emotions; wait our turns; and keep from daydreaming when we need to focus

1. **Cognitive Flexibility**
   - Shift attention or “mental gears” when faced with new information, circumstances, perspectives or priorities
   - Out-of-the-box thinking, ability to apply different rules to different circumstances, keep from becoming too set in our ways

1. **Working Memory**
   - Ability to keep multiple pieces of information in mind and accessible
   - “The mental surface on which important information is placed” so it’s ready to use in our daily lives

Connections in the Brain

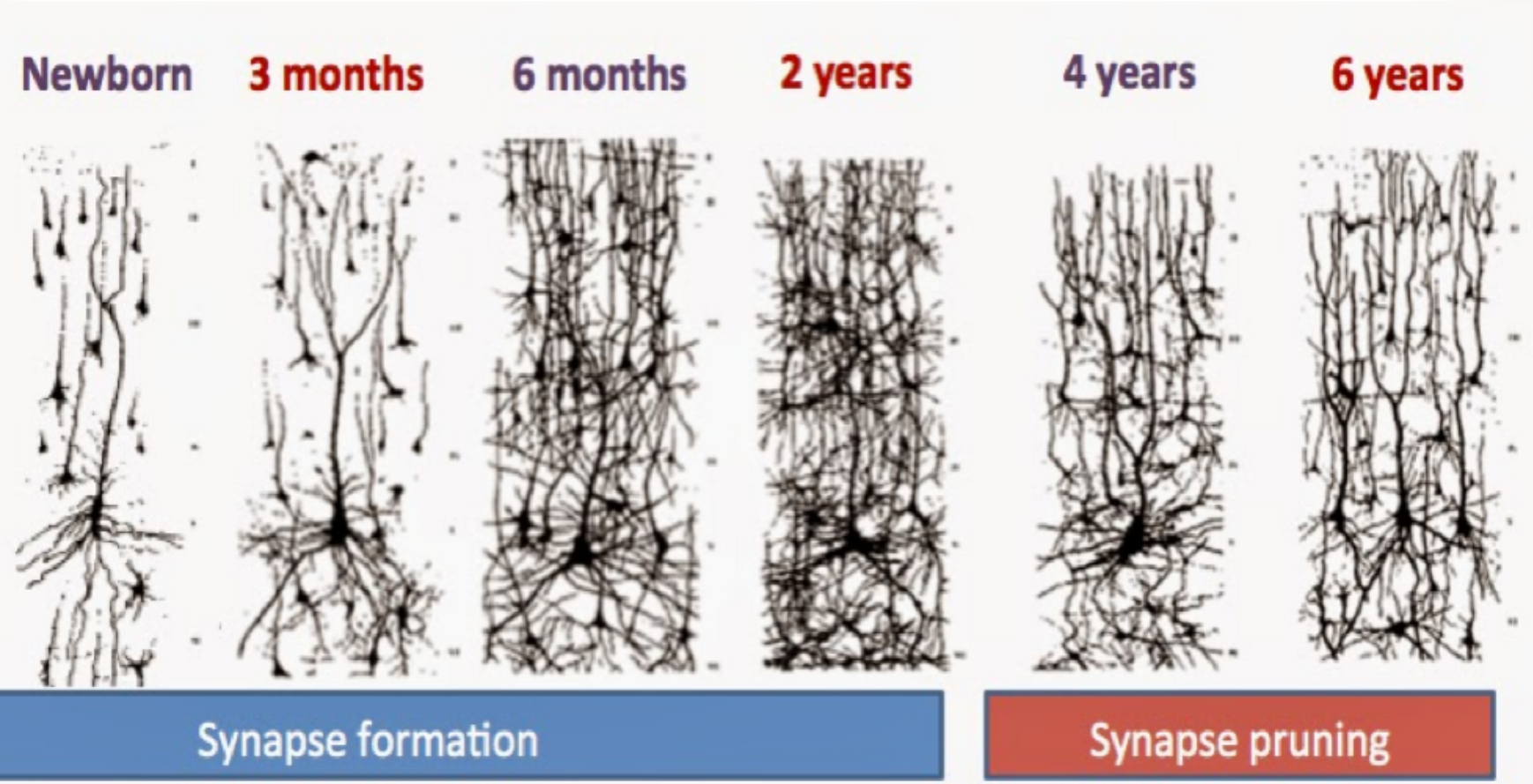


Image Source: Universe Review



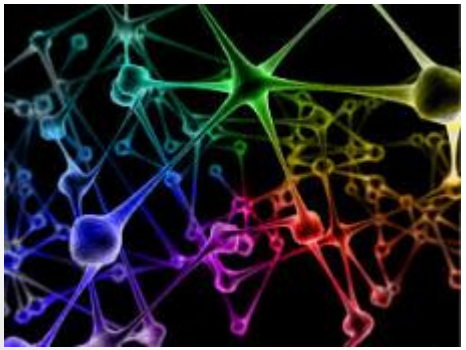
Image Source: Lutherwood Child & Parent Place

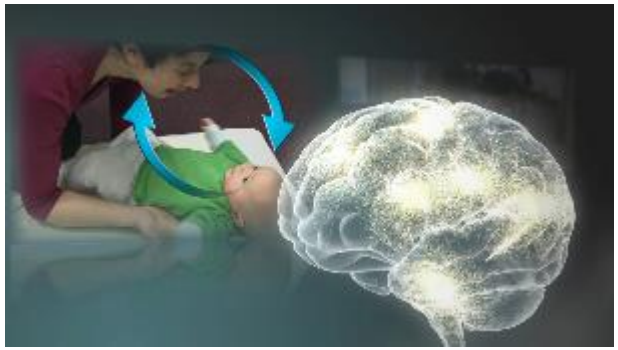
WHY EARLY

The Power of Social Networking

Strengthening connections and assembling the 21st C toolkit of skills involves:

- **Connecting & pruning** of neurons
- **CEOs = Chief *Engagement* Officers**
  - **Caring responsive adults**
  - **Socially-gated learning**
  - **Serve & Return**







The 7 QI Skills



ME

WE

WHY

WILL

WIGGLE

WOBBLE

WHAT IF

QI Skill 1: ME

Focusing Attention on Self Management

- **Self-awareness**
- **Self-regulation**
- **Self-control**
- **Attention**
- **Focus**





He that controls others may be powerful, but he who has mastered himself is mightier still

- Lao Tsu

QI Skill 2: WE

Learning to Play Well With Others

The **people skills** necessary for effective communication, collaboration, relationships and teamwork, including:

- **Emotional Intelligence**
- **Social-emotional skills**
- **Language**
- **Empathy**
- **Perspective taking**
- **Active listening**







QI Skill 3: WHY

Seeing the World As a Question Mark

The **curiosity skills** necessary to strive for a better understanding of how the world works:

- **questioning**
- **curiosity**
- **inquisitiveness**



The important thing is not to stop questioning. Curiosity has its own reason for existing

- Albert Einstein

QI Skill 4: WILL

Self-Motivation: Applying the Power of Will

The **motivation skills** that encompass:

- **Dedication & drive**
- **Commitment & conscientiousness**
- **Grit & gumption**
- **Persistence & perseverance**
- **Get-the-job-done, can-do, go-getter attitudes**



You can motivate by fear and you can motivate by reward, but both of these are only temporary. The only lasting thing is self-motivation.

- Homer Rice

QI Skill 5: WIGGLE

Putting Wiggles to Work

Physical *and* intellectual restlessness embodied by ***agile*** "***movers*** and ***shakers"*** who ***take action***, set ***stretch*** goals and ***actively reach*** for the stars



Creative thinkers try new things and move with the changing world

- Elaine Dundon, *Seeds of Innovation*

QI Skill 6: WOBBLE

Raising Children Who are Fit to Fail



The **adaptability skills** that build and foster:

- **Ability to face, overcome, learn from failure**
- **Resilience**
- **Adaptability**
- **Agility**



"Many people think you get stability by minimizing all risk. But ironically, in a changing world, that's one of the riskiest things you can do."

- Reid Hoffman, *The Start Up Of You*

QI Skill 7: WHAT IF

Imagining a World of Possibilities

- The "**possibility" skills** that allow us to understand not just how the world is, but envision how it could be. They include:
  - **Out-of-the-box, innovative thinking**
  - **Open-mindedness**
  - **Curiosity**
  - **Imagination**
  - **Creativity**
  - **Hope**



The creative adult is the child that survived

- Ursula K. Le Guin

QI For All

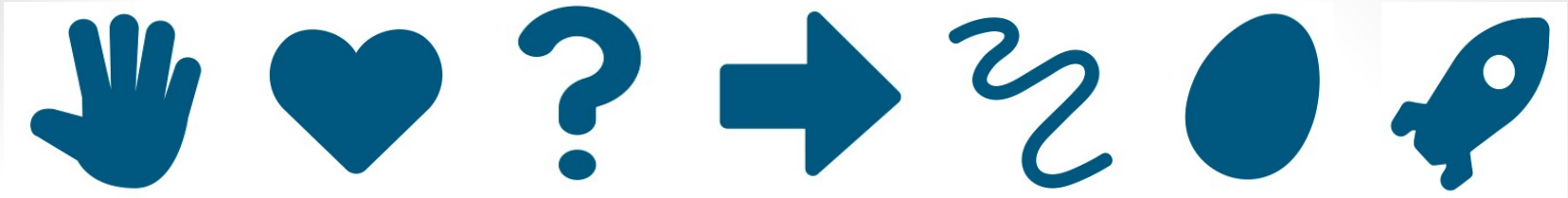
Hope is QI

Our children are the rock on which our future will be built…The rich potential in each child must be developed into the skills and knowledge that our society needs to enable it to prosper.

- Nelson Mandela







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Five Connections that Will Change Children's Lives
&
Skills Every Child Will Need to Succeed in the 21st C



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