





Pilot Numbers



Innate Ability



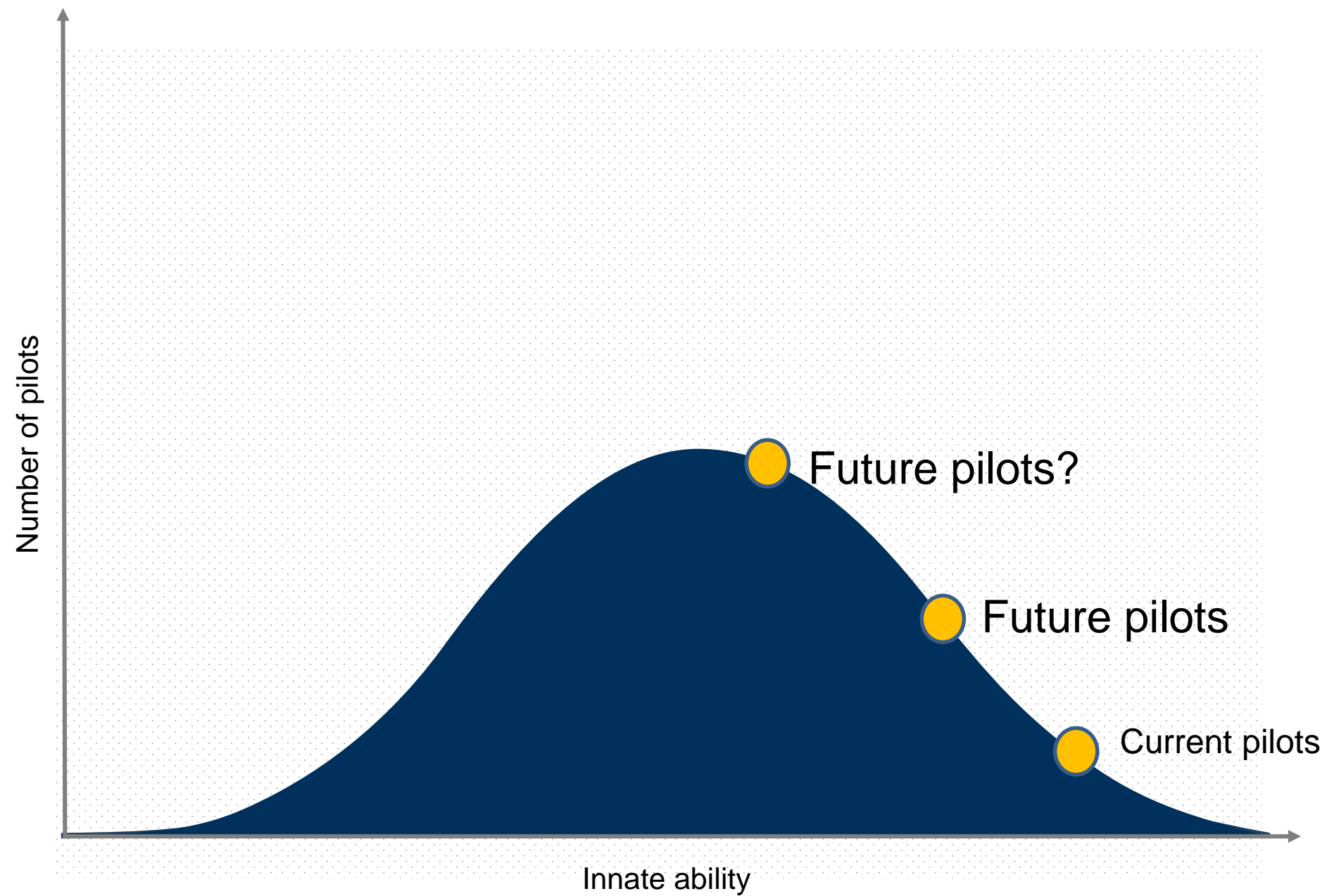
Flight Safety

UNIVERSITY
OF SOUTHERN
QUEENSLAND
AUSTRALIA

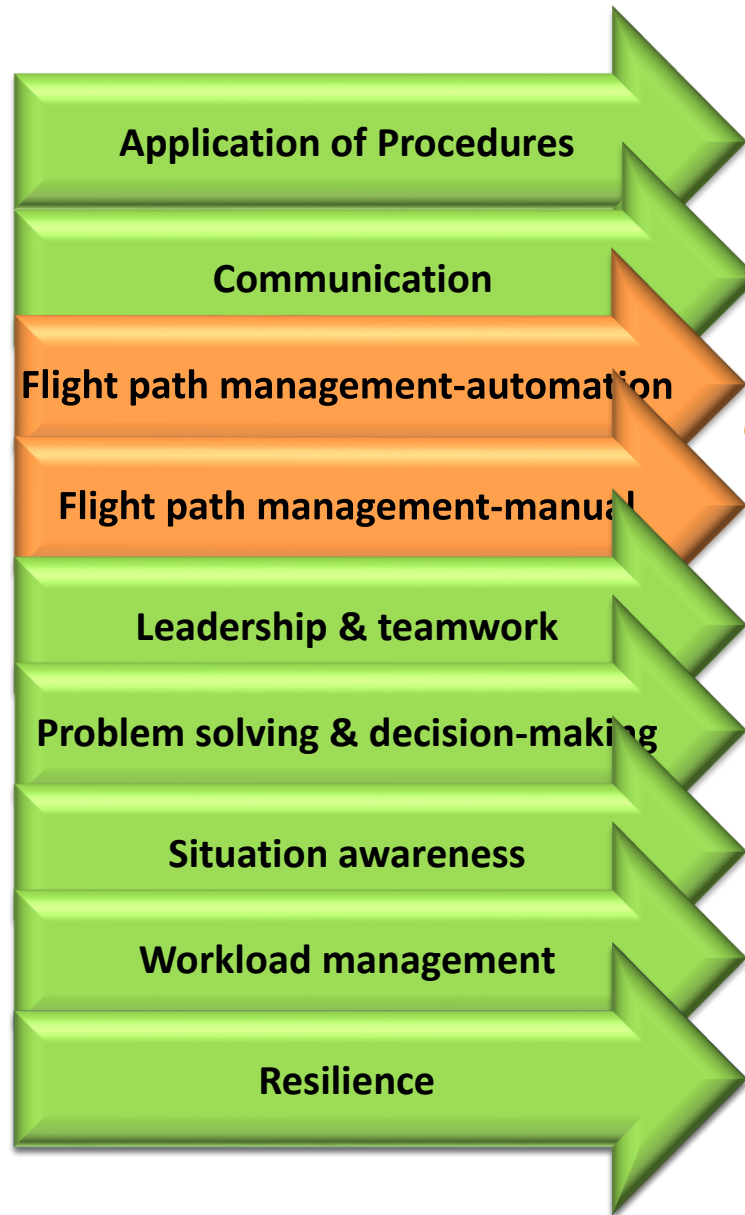


End of slide show, click to exit

NOT QUITE!

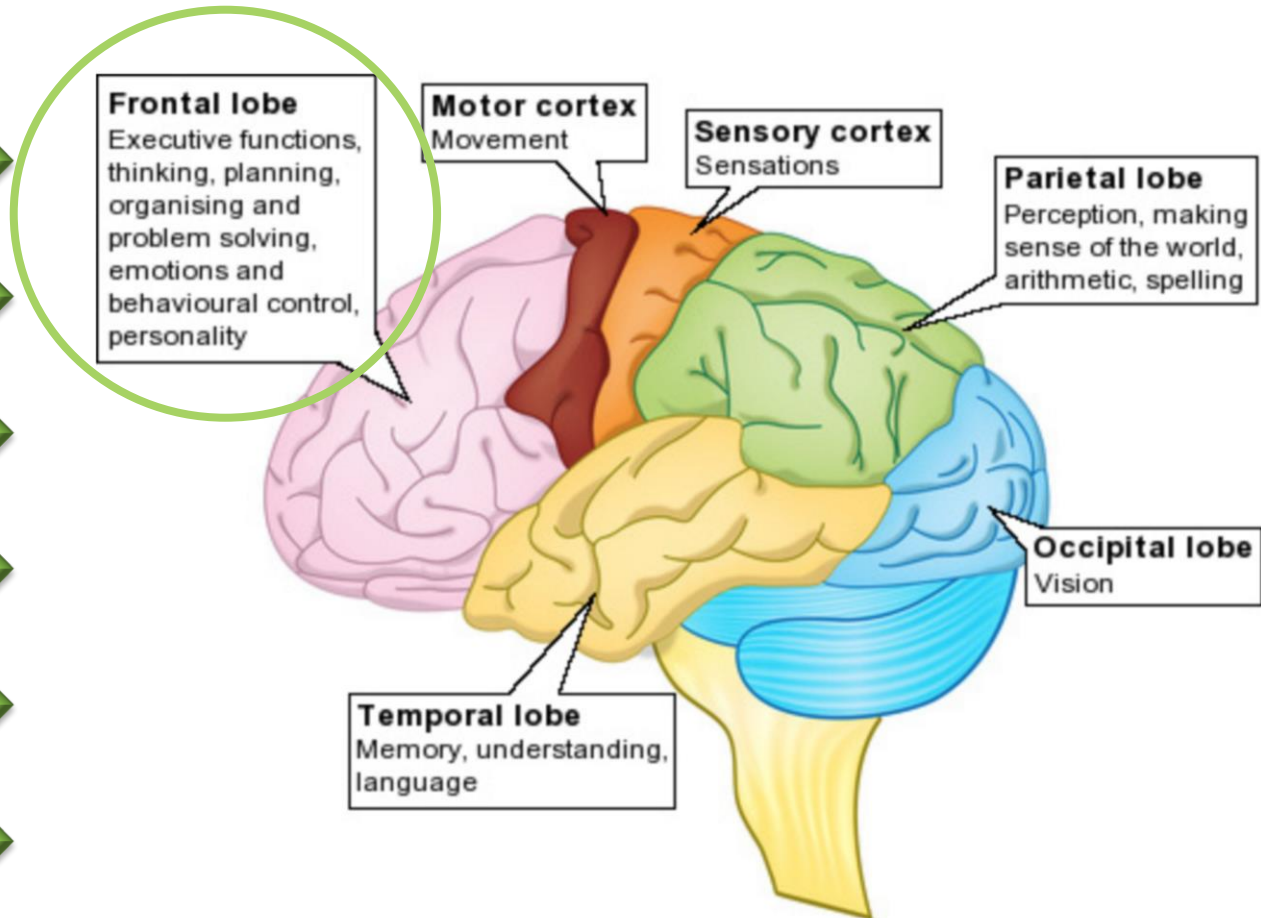


ICAO Pilot Competencies

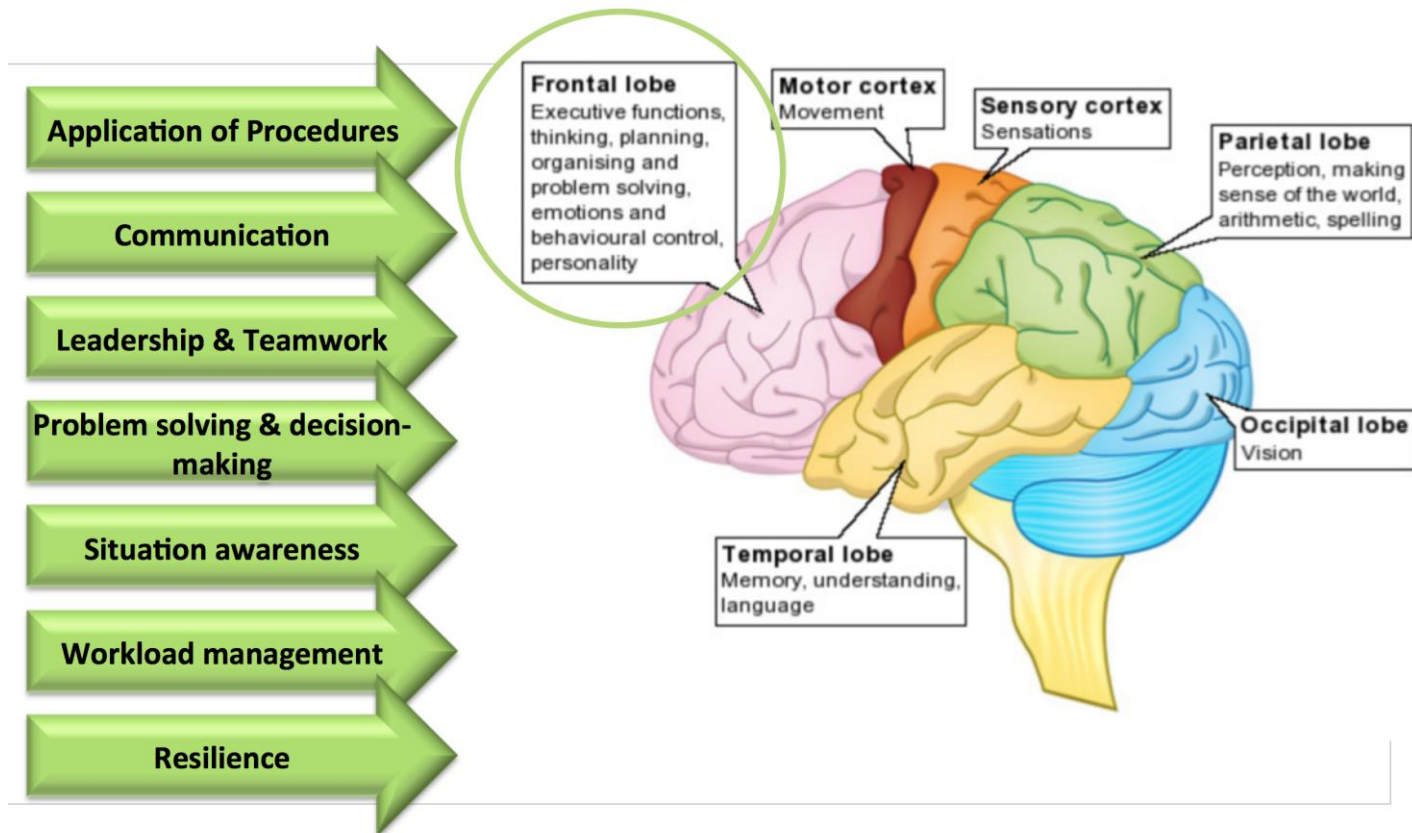


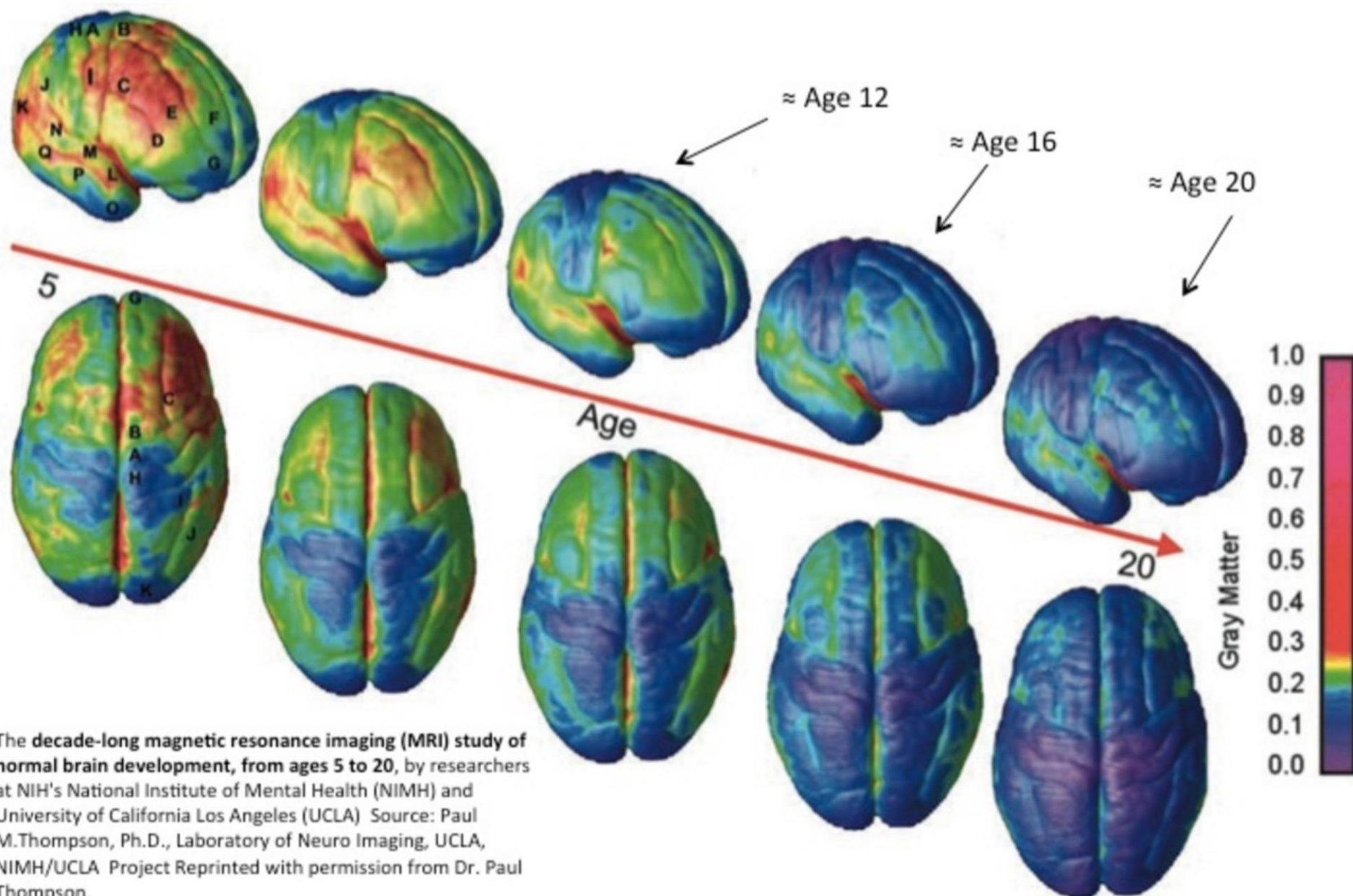
8 Areas of
Competency
Total systems approach



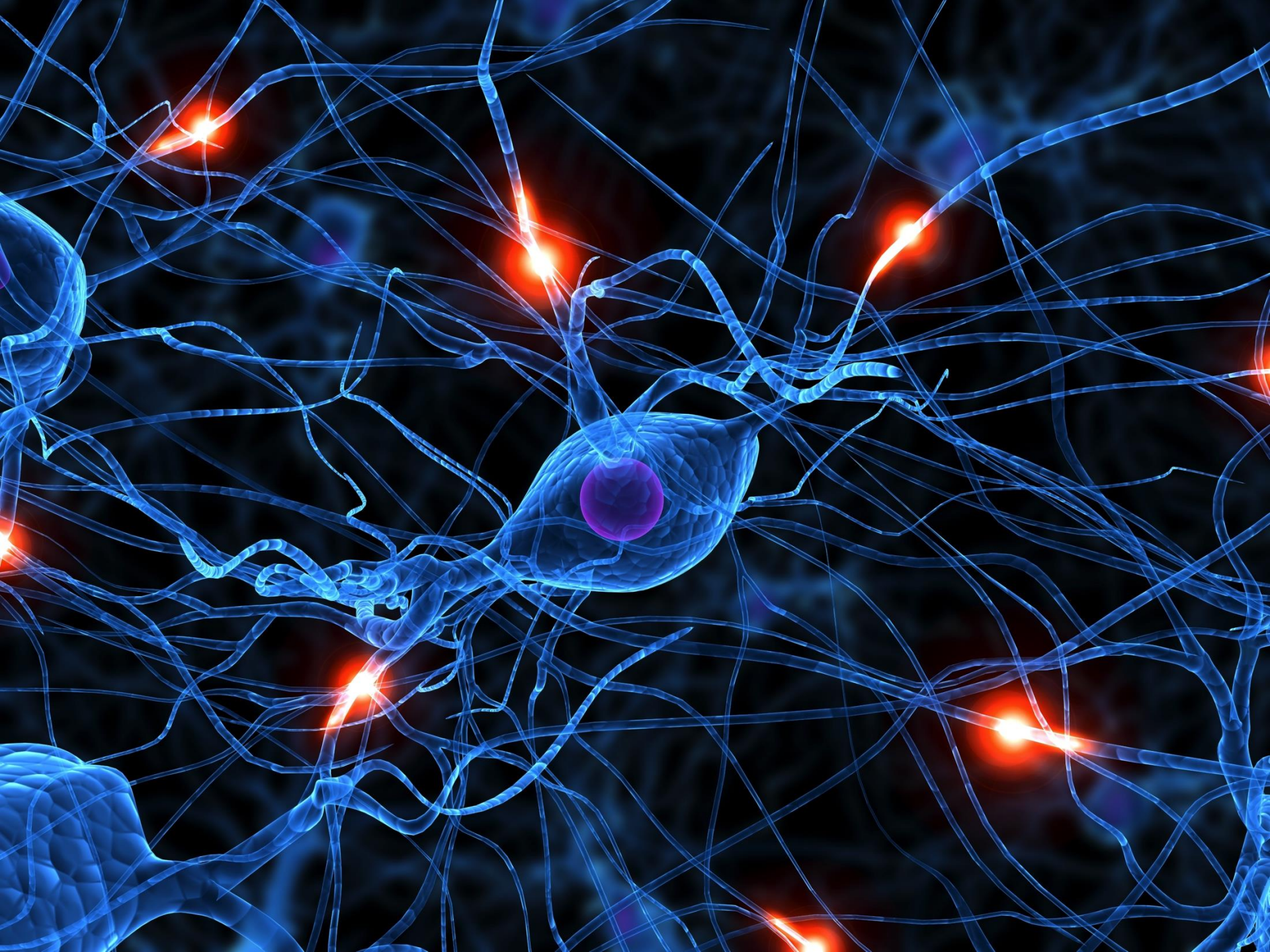


Non-Technical Competency Development linked to Pre-frontal cortex



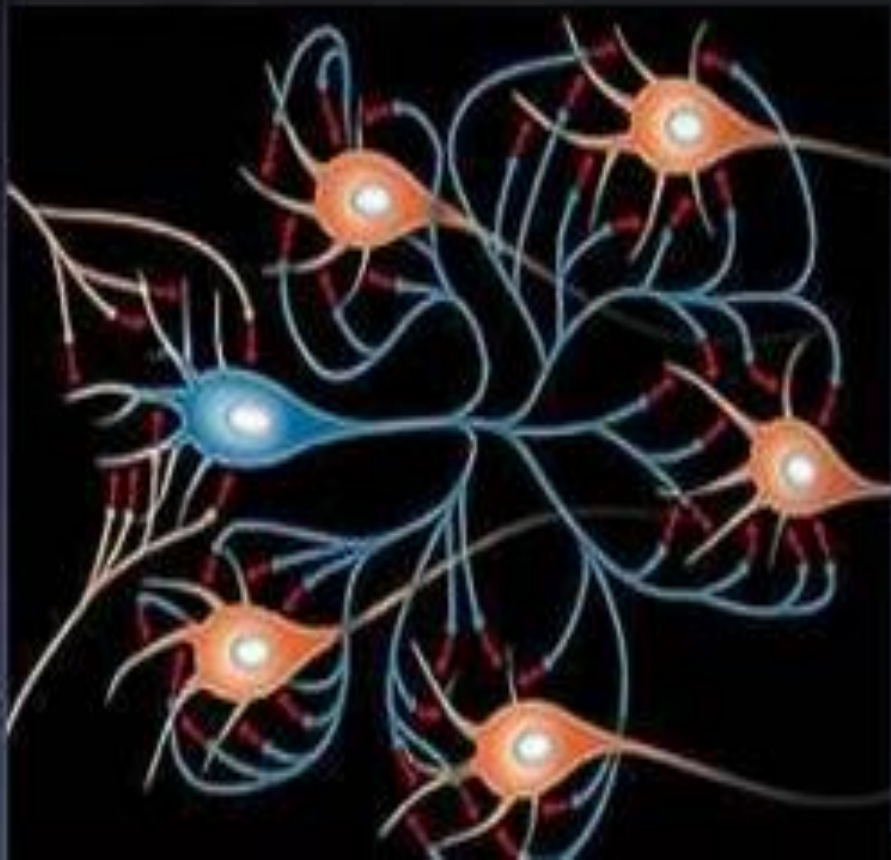


The decade-long magnetic resonance imaging (MRI) study of normal brain development, from ages 5 to 20, by researchers at NIH's National Institute of Mental Health (NIMH) and University of California Los Angeles (UCLA) Source: Paul M.Thompson, Ph.D., Laboratory of Neuro Imaging, UCLA, NIMH/UCLA Project Reprinted with permission from Dr. Paul Thompson.



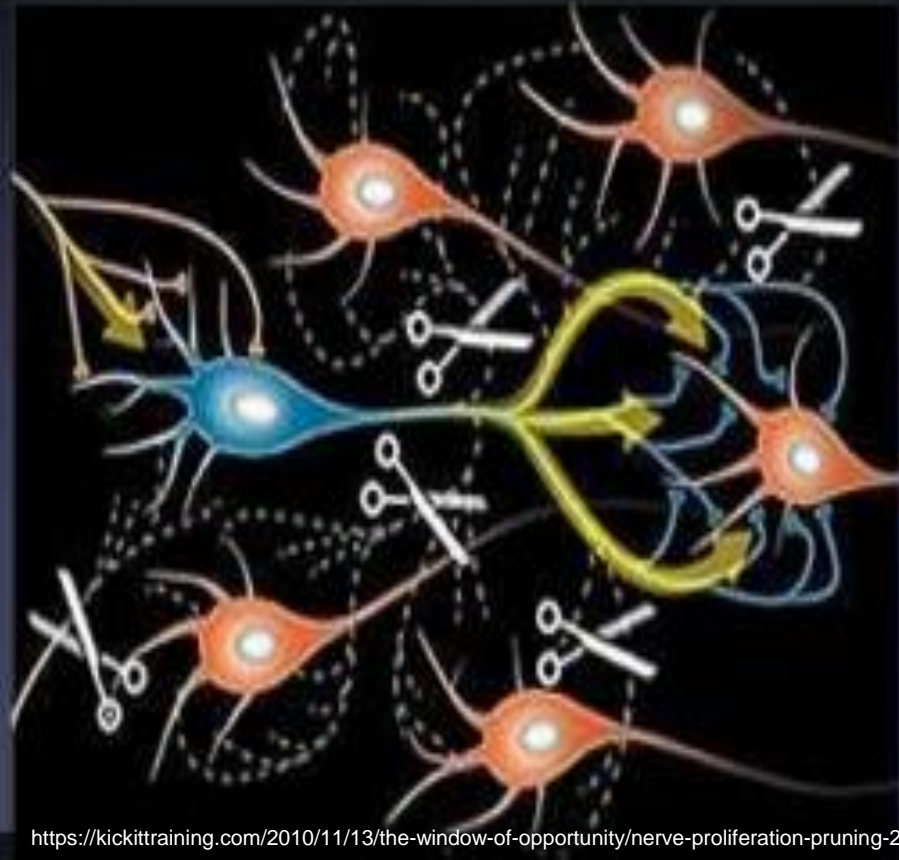
Nerve Proliferation...

- By age 11 for girls and 12 for boys, the neurons in the front of the brain have formed thousands of new connections. Over the next few years most of these links will be pruned.



...and Pruning

- Those that are used and reinforced — the pathways involved in language, for example — will be strengthened, while the ones that aren't used will die out



Changes in the brain take place in the context of many other factors, among them, inborn traits, **personal history**, family, **friends**, **community**, and culture (National Institutes of Health)



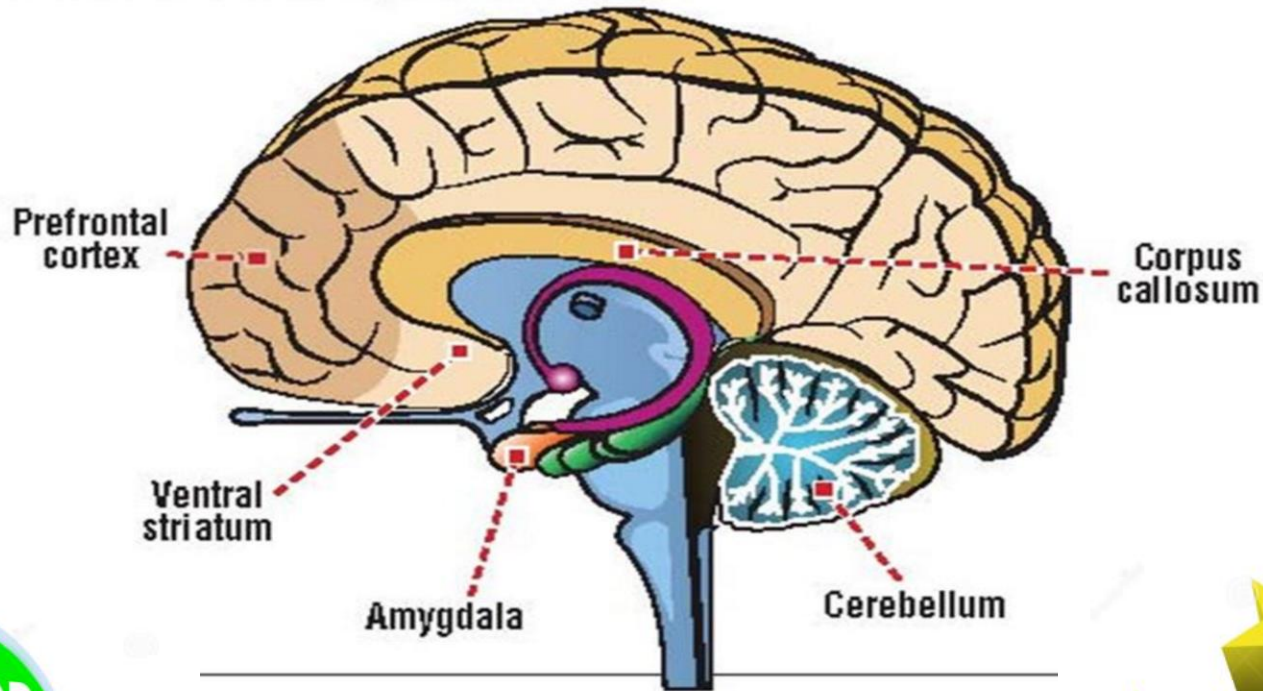


A high-angle photograph of a diverse group of 15 people of various ages and ethnicities holding hands in a circle on a grey concrete floor. In the center of the circle is a large white circle containing the word "Community" in a black, handwritten-style font, underlined with a thick red stroke.

Community

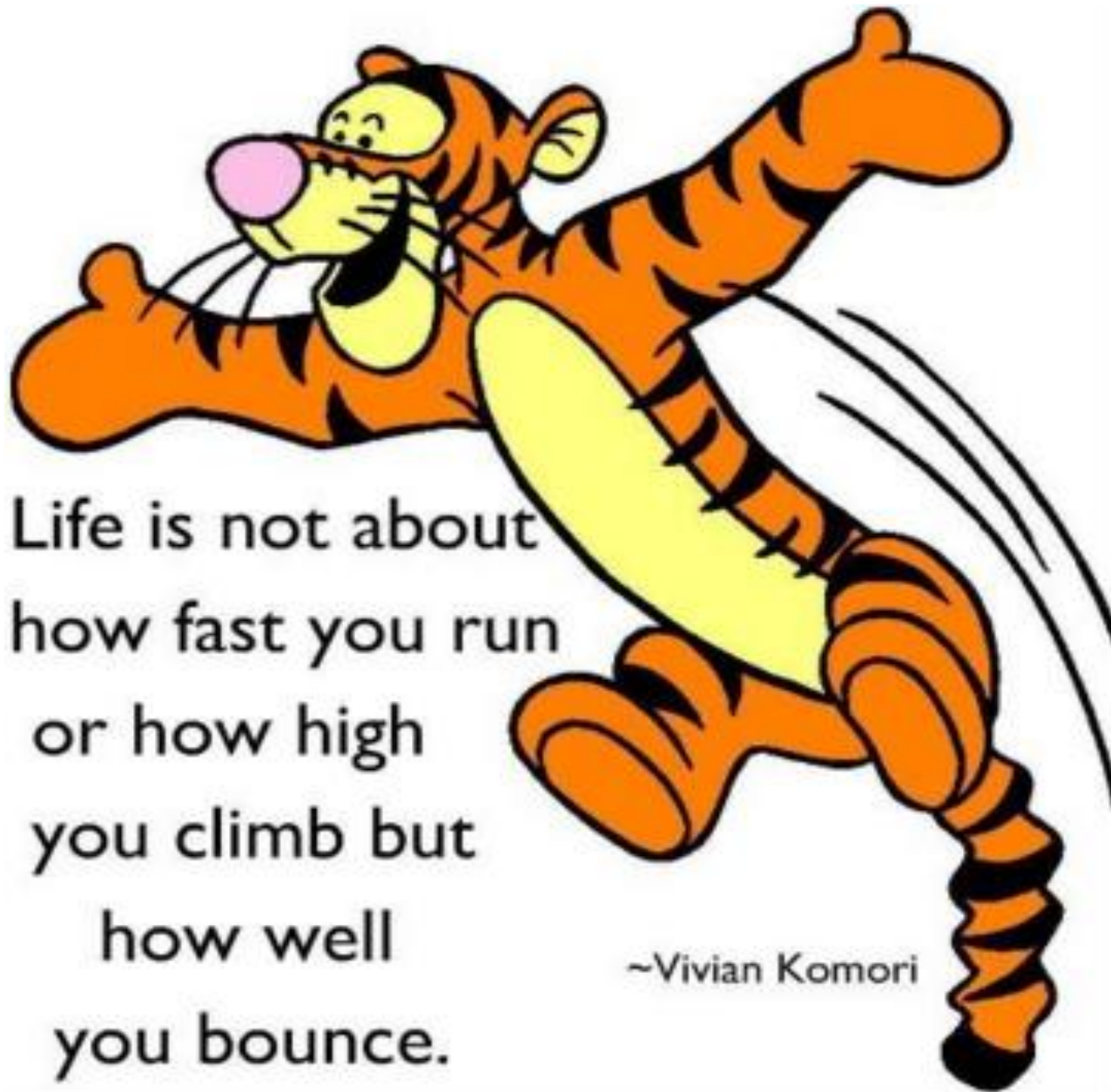
THE ADOLESCENT BRAIN

The prefrontal cortex often is called the 'executive brain.' But it is not at peak performance until young adulthood. In the meantime, the ventral striatum region makes teenagers extra sensitive to rewards while the less-active amygdala region leaves them less sensitive to punishment and emotional consequence.



The success path:





Life is not about
how fast you run
or how high
you climb but
how well
you bounce.

~Vivian Komori

**Prefrontal Cortex
Continues to
develop over
25**

**Prefrontal Cortex
Development Influenced
by Experiences and
Environment and
responds to rewards!**

**Youth learn well through
tiered mentoring and
peer to peer
development (from High
School through
University and into
Industry)**

Outcomes

- 1. Dramatic increase in numbers of
capable young people for the
industry**
- 2. Improved NTC skills in young
pilots – “hard wired” (and for life)**
- 3. Improved life skills in young
employees (and for life)**
- 4. Improved attitudes and
approaches to life for young
employees (and for life)**

**Non Technical
Pilot
Competencies**

**Provide evidence based
rewards linked
Experiences/Environment/
Tiered mentoring and
peer to peer
development**

**“The path to success is to take
massive, determined action”** (Anthony Robbins)

