

How to cater for learning diversity of children

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Learning diversity of children

- **Multiple Intelligences, MI (Gardner, 1983)**

Verbal/Linguistic

- Learn well through languages and words; love playing word games, reading, discussion and writing.

Logical/Mathematical

- Learn well with reasoning, look for patterns and logical sequence in matters through scientific experiments, and interested in new development in science.

Visual/Spatial

- Sensitive to colors, lines, shapes, forms, spaces and the relationships among them. Learn well through imagery and graphics.
- Visual/Spatial intelligence in form – strength of artists.
- Visual/Spatial intelligence in abstraction – strength of geometry experts.
- Visual/Spatial intelligence in form + abstraction – strength of architects.

Bodily/Kinesthetic

- Enjoy creating things with their hands and outdoor activities. Use hand gestures or other body language when engaging in conversation with others. Learn well through bodily senses.

Musical/Rhythmic

- Sensitive to rhythms, tones, tunes and quality of sounds. Learn well through rhythms and tunes.

Inter-personal/Social

- Good at observing and differentiating the emotions, intentions, temperaments and feelings. Enjoy group activities and usually considered as a leader. Learn well with feedback from others.

Intra-personal/Introspective

- Good at being aware of their own emotions, intentions, motivations, characters and desires. Understand their personal strengths and weaknesses through feedback from others. Identify life goals through self-reflection. Prefer to be alone.

Naturalistic (Gardner 1999)

- Enjoy learning about plants, animals and natural environment. Good at environmental science and biology.

Learning diversity of children (Cont.)

- **Executive Functions (EF)**

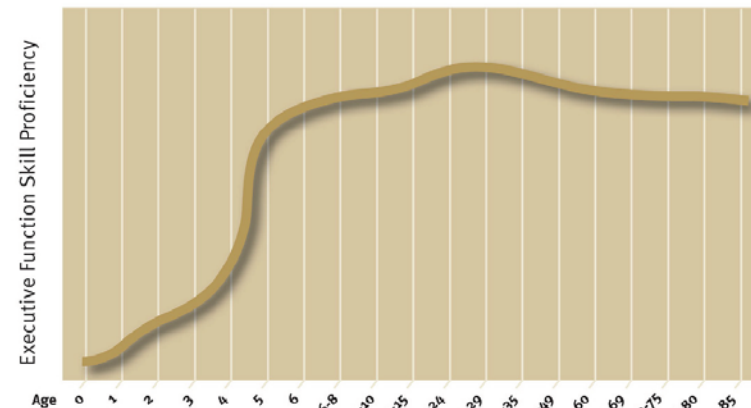
IN BRIEF | EXECUTIVE FUNCTION: SKILLS FOR LIFE AND LEARNING

A series of brief summaries of essential findings from recent scientific publications and presentations by the Center on the Developing Child at Harvard University.

Research on the developing brain shows us that early childhood experiences build the foundation for a skilled workforce, a responsible community, and a thriving economy. A new evidence base has identified a set of skills that are essential for school achievement, for the preparation and adaptability of our future workforce, and for avoiding a wide range of population health problems.

In the brain, the ability to hold onto and work with information, focus thinking, filter distractions, and switch gears is like an airport having a highly effective air traffic control system to manage the arrivals and departures of dozens of planes on multiple runways. Scientists refer to these capacities as executive function and self-regulation—a set of skills that relies on three types of brain function: working memory, mental flexibility, and self-control. Children aren't born with these skills—they are born with the potential to develop them. The

Executive Function Skills Build Into the Early Adult Years



Source: Weintraub et al. (Submitted for Publication)

- self control/ self-regulation skills
- working memory
- mental flexibility

Center on the Developing Child at Harvard University (2011). INBRIEF: Executive Function: Skills for life and learning. Retrieved from www.developingchild.harvard.edu

EF facilitates...

- Focused, patience
- Adaptive
- Self-control

School
achievement

Positive
behavior

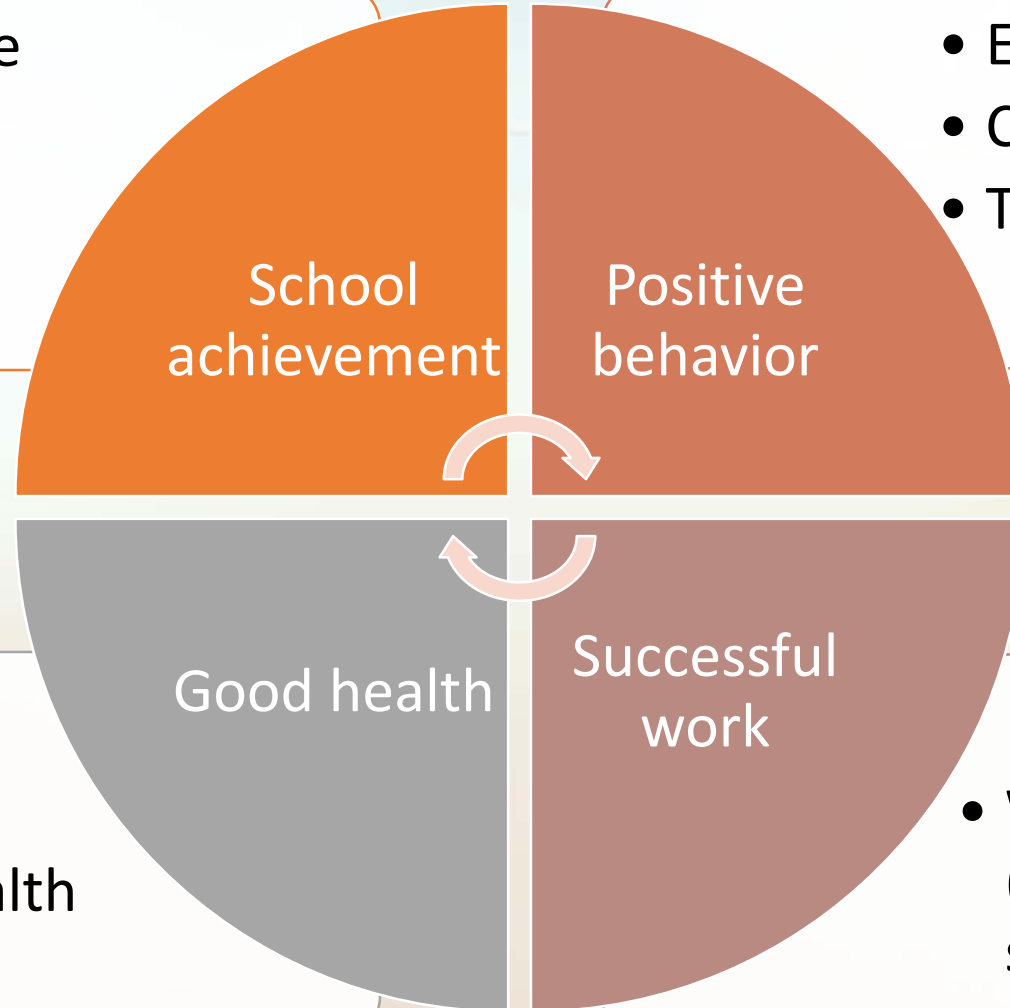
- Emotionally sensitive
- Cooperative, decisive
- Think critically

Good health

Successful
work

- Stress resistance
- Concern own health

- Work skills ready
(e.g. problem
solving, planning)



What is the relationship between MI and Intelligence Quotient (IQ)?

- Multiple intelligences

- self control
- working memory
- mental flexibility

Attitude that parents should have towards developing children's talents

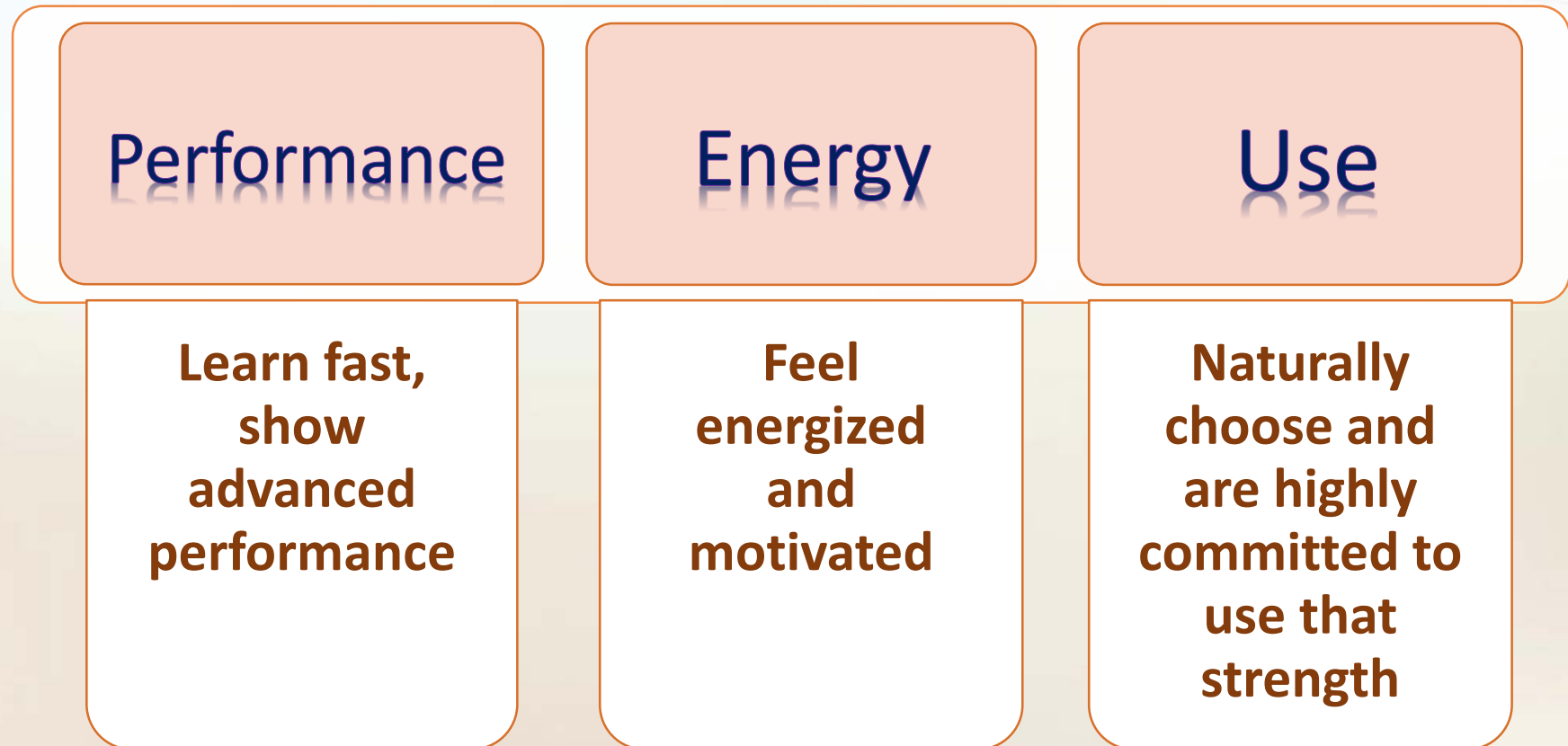
1. **Growth Mindset** (Carol S. Dweck, 2007)
 - Abilities can always be improved by putting efforts and strategies in learning
 - Contrasting with the Fixed Mindset – that believes abilities are innate and fixed with little room for advancement

Nurturing children's growth mindset

- Emphasize process, effort and improvement rather than results
- Encourage to seek feedback
- Set challenging but realistic learning expectations
- Build up a growth-oriented atmosphere, emphasize learning and improvement

2. Strengths Based (Lea Waters, 2015)

- You can spot a child's strengths from 3 aspects



“Strengths Based” Parenting

- Label their strengths
 - [thank you for your sharing → + you are kind to share]
- Provide training opportunity and exposure
- Give the right equipment
- Create practice opportunities
- Role model: telling about famous people who share the same strengths

*Will you teach
an eagle to win
in a running race?*

Cater for learning diversities – to provide suitable training

- Aim to build basic and generic skills
- Should hold an “Autonomy-supportive” attitude



Just right

3 key elements to nurture EF

Relationship

- **Trusting**
- **Reliable presence**
- **Supportive**
- **Skill modeling**
- **Guidance**

Activities

- **Guided coping strategies**
- **Foster social connection**
- **Vigorous physical exercise**
- **Repeated practice and increase in complexity**

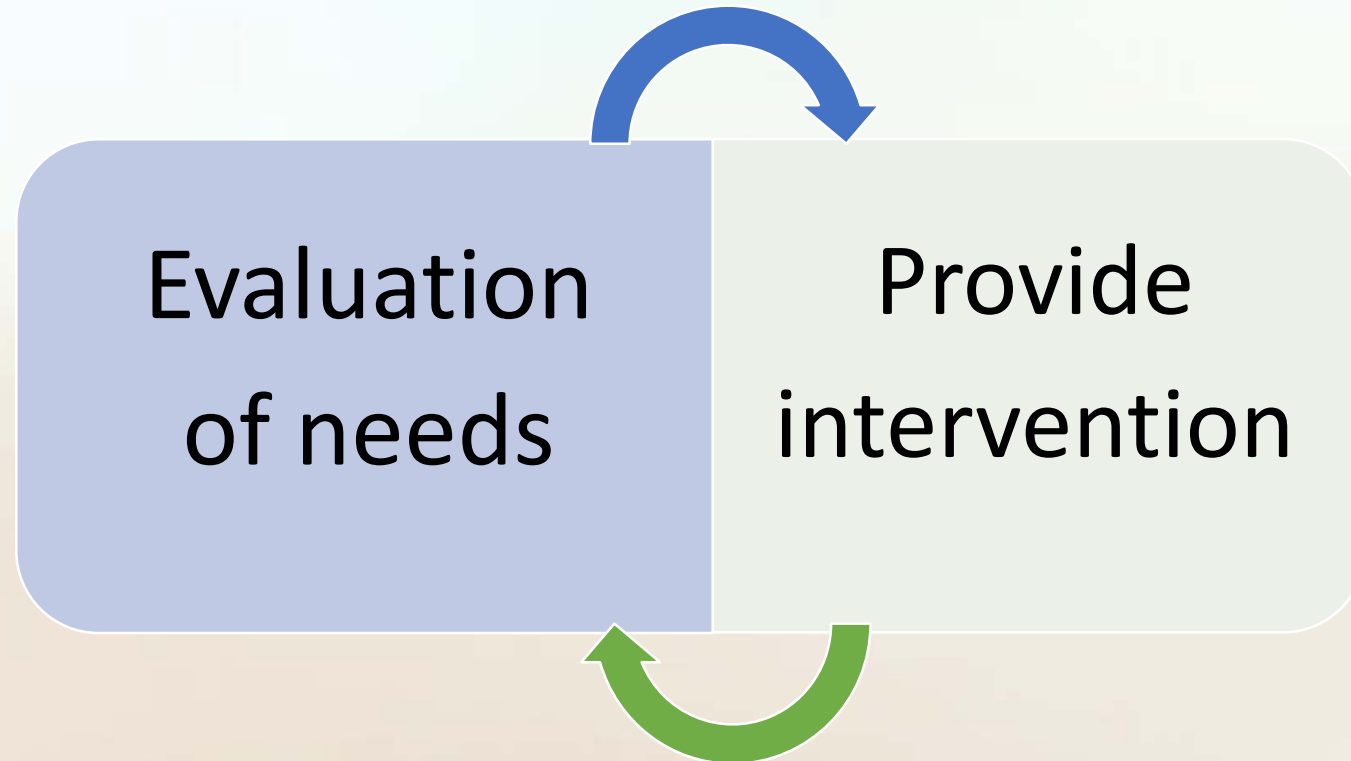
Places

- **Feel safe**
- **Opportunity to explore**
- **Economically and socially stable**

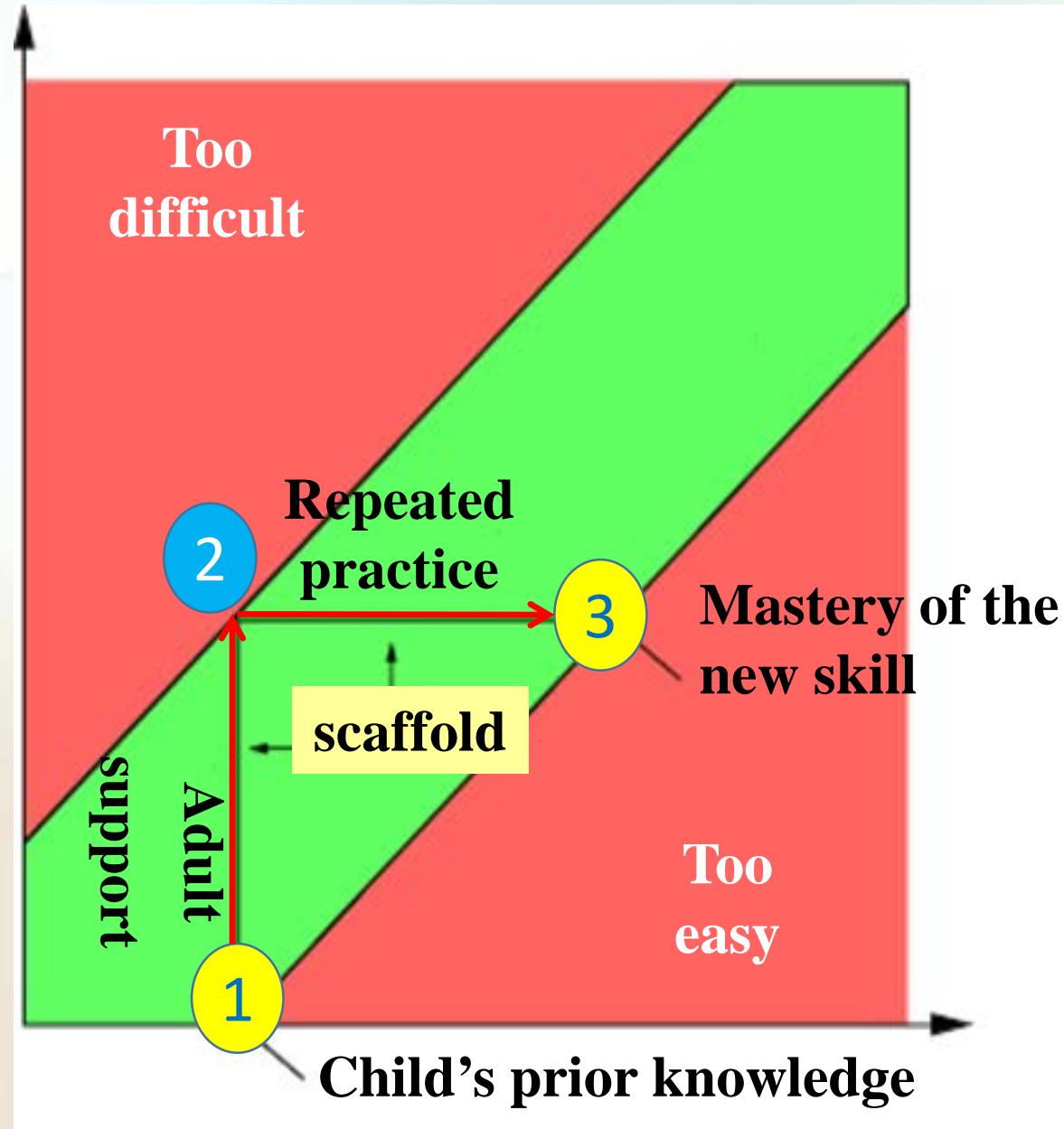
- Play in the park and have vigorous physical exercise in the countryside
- Nurture working memory, self control and mental flexibility
 - Games that require spontaneous reaction such as “teacher said”
 - Board games : card games, chess, Animal Logic, Uno
 - Enhance visual memory : memory card games, searching targets in magazine within a time limit, mental rehearsal of processing a task, e.g. setting a dining table for 5 people
 - Multi-sensory input and use of highlighter

Cater for learning diversities – to provide timely and suitable support

1. Responsiveness to Intervention, RTI



2. Scaffolding



Conclusion:

Cater for learning diversity of children

- Build up basic and generic skills; be aware of personal strengths
- Growth mindset → emphasize improvement, encourage curiosity
- Strengths based parenting → provide suitable environment, tools, opportunity for practice, and role models
- Timely support with proper scaffolds
 - Set realistic learning goal → provide adequate adult support and repeated practice → mastery of new skill



Q & A