

# 2<sup>nd</sup> Intl. Conference on Future Education



## **Session 3 F: Individuality & Transformational Leadership**

### **The BIG FIVE**

### **The Science Gap in Educational Reform**

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## **Introduction:**

Developed in the 18th century

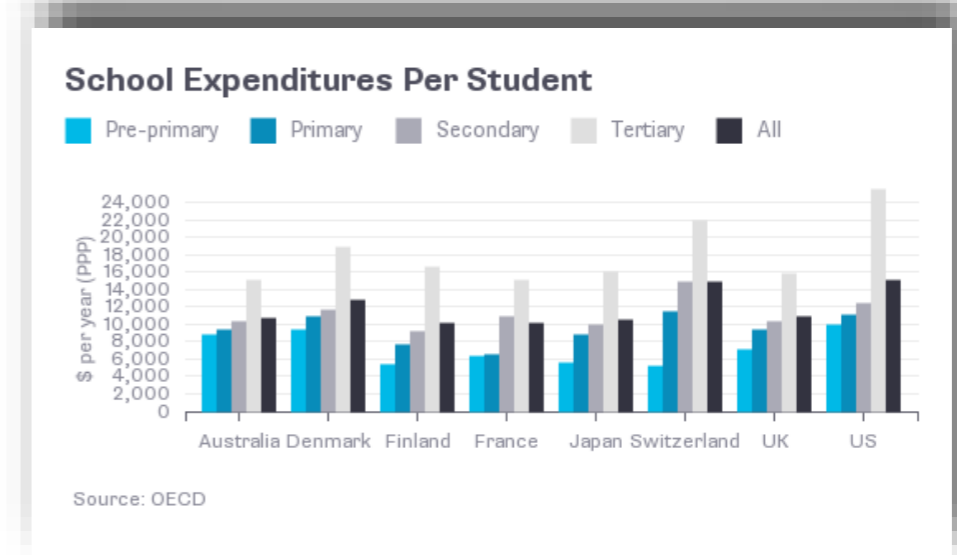
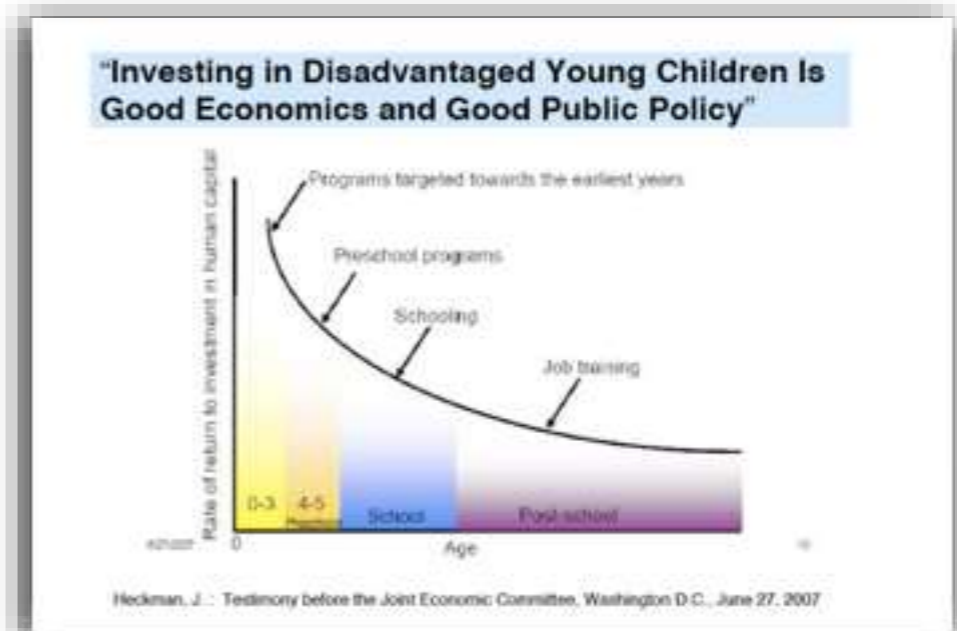
50 Points (PISA): 2 years; 0,6% economic growth

It takes 50 years to make a change

We do not tap into the full potential

# The Big Five: The science gap in educational reforms

## 1. J. Heckman Equation



<https://heckmanequation.org/resource/lifecycle-benefits-influential-early-childhood-program/>

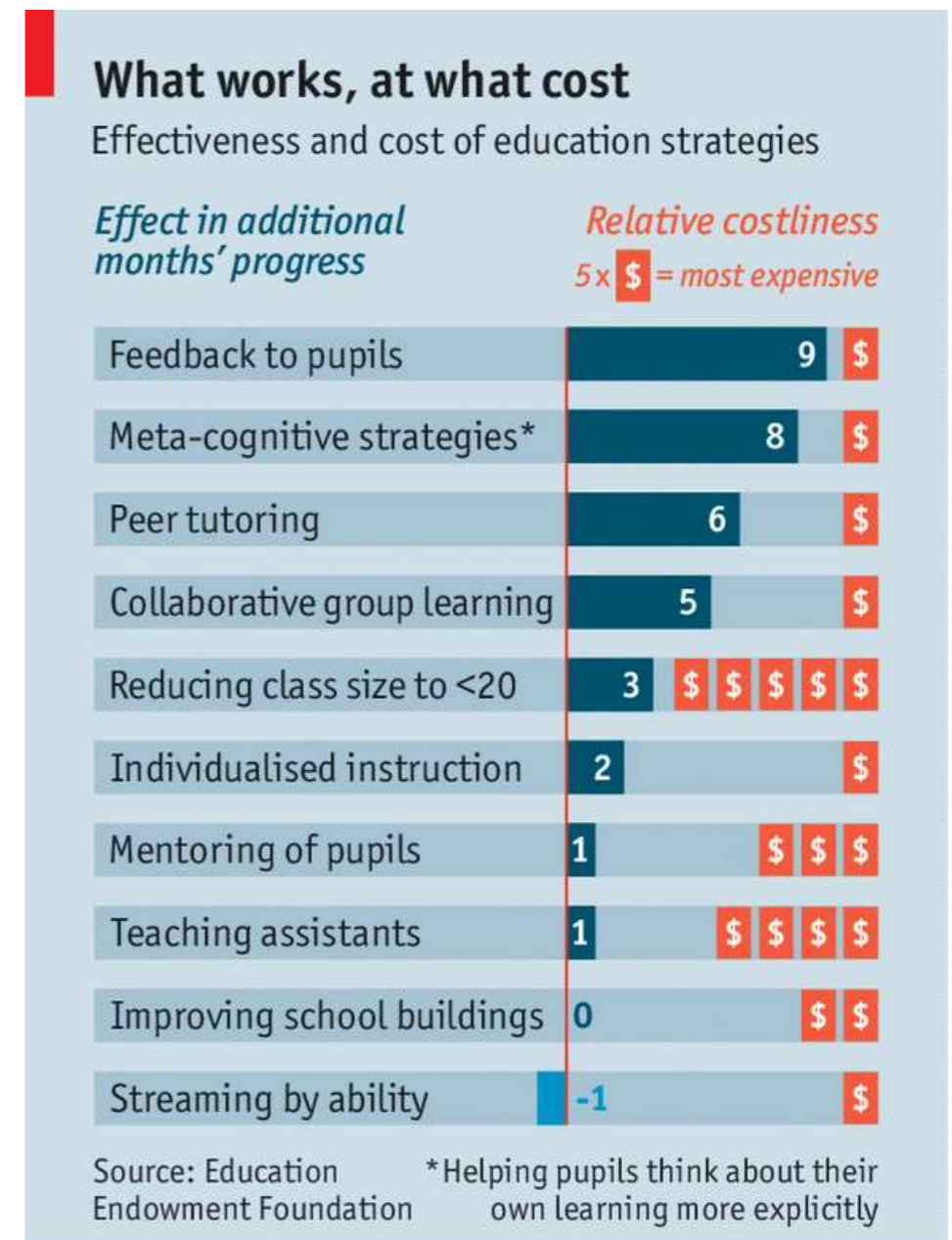
OECD, 2012

N.Yaljian et al 2015

# The Big Five: The science gap in educational reforms

1. J. Heckman Equation

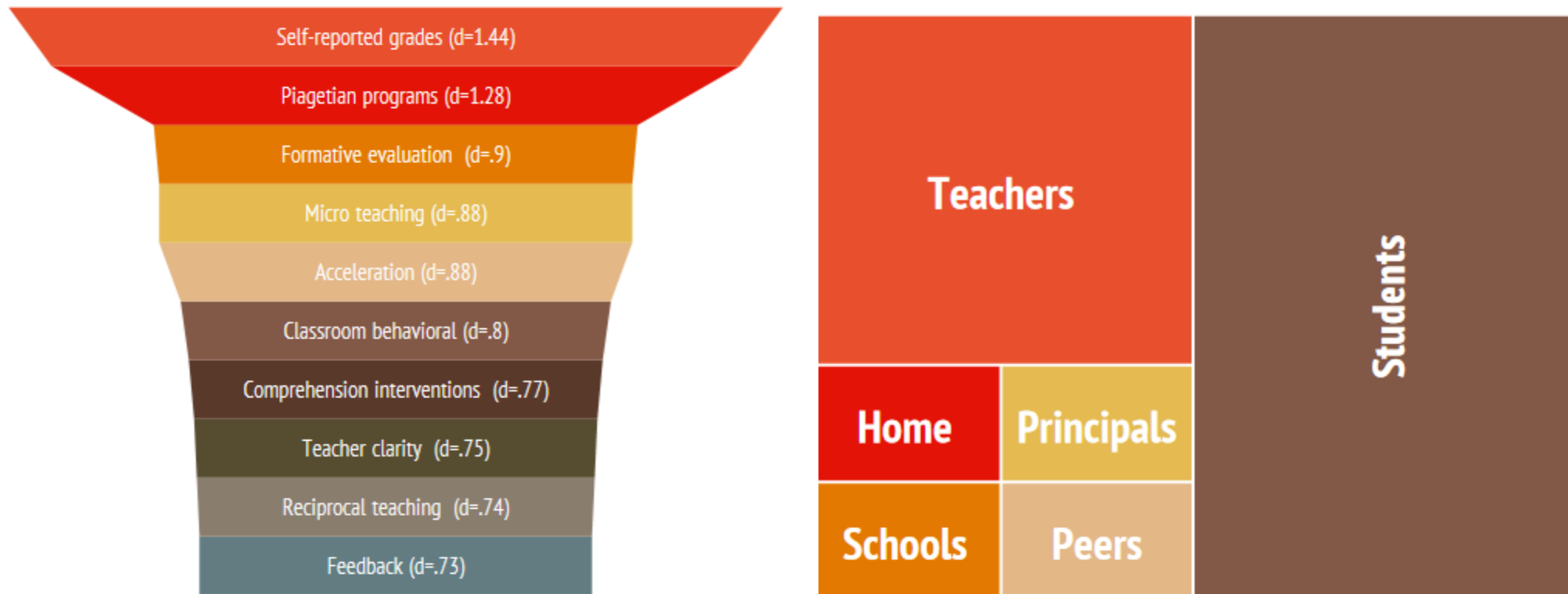
2. J. Hattie Findings



Economist.com

OECD 2012, 2015,  
J.Hattie 2012 ff

# Inter-personal variables oversteer institutional variables by factor 2

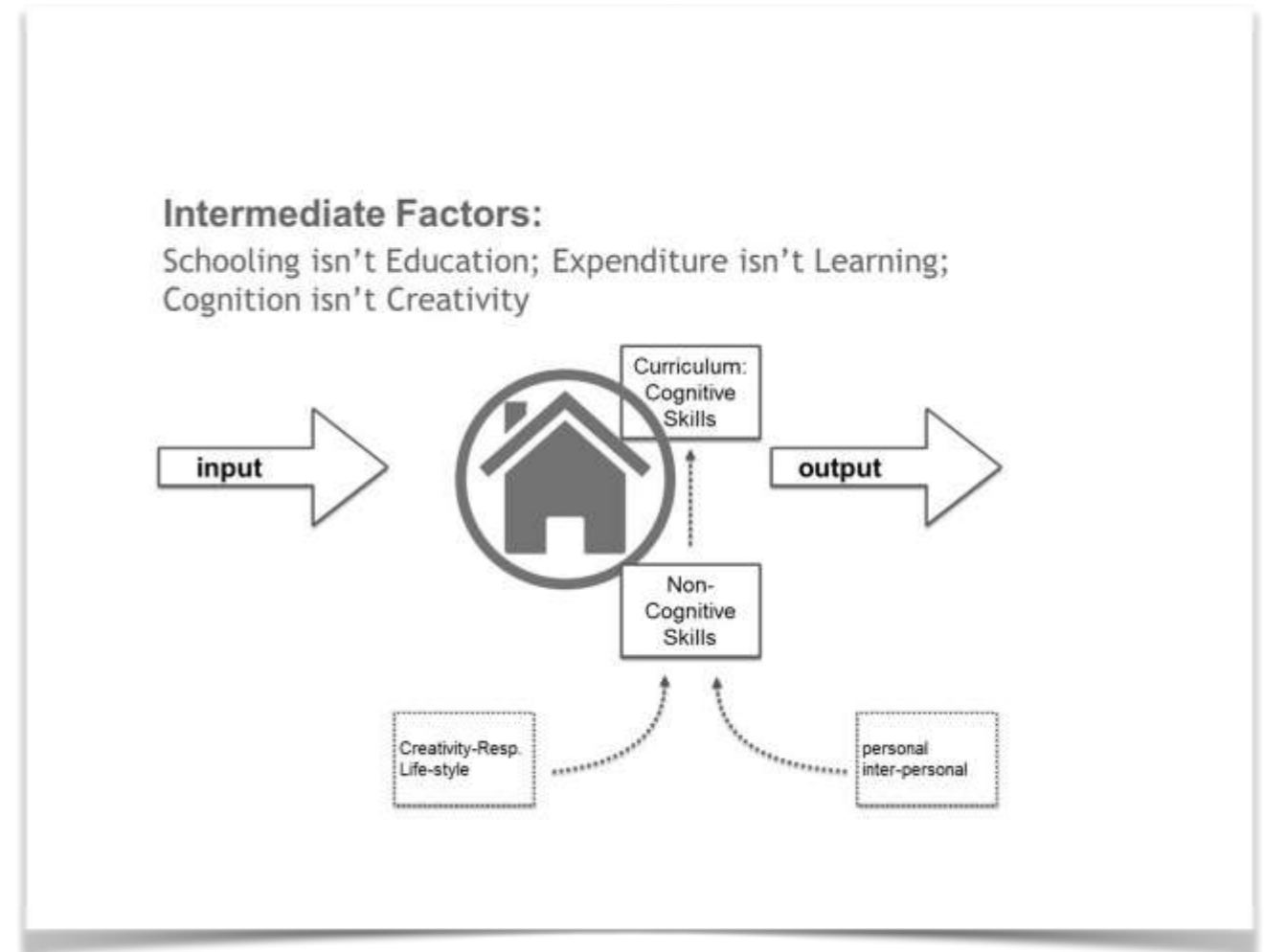


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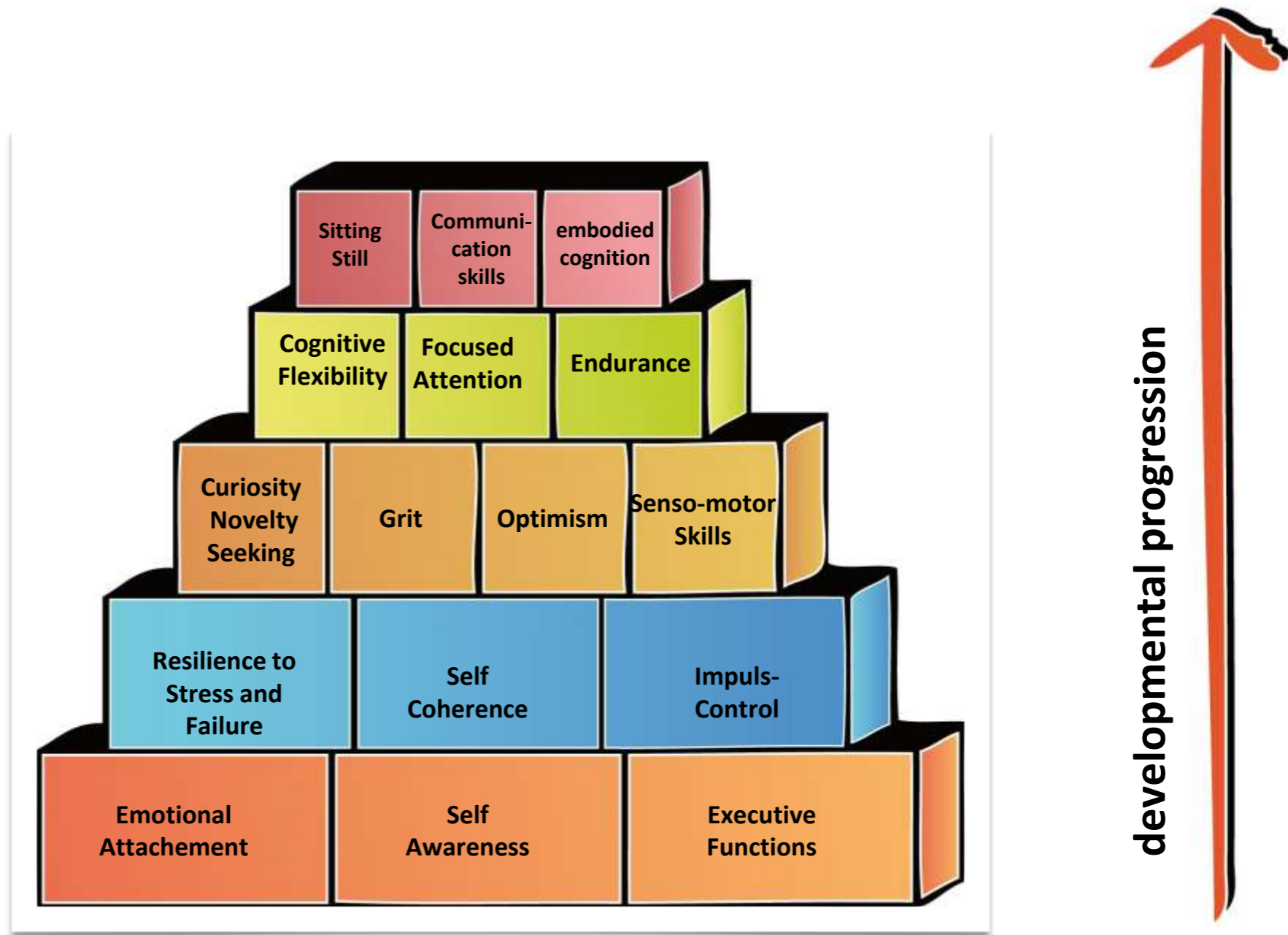
1. J. Heckman Equation

2. J. Hattie Findings

3. Input-Output put Fallacy



# Building Block of Non-cognitive factors:



# The Big Five: The science gap in educational reforms

1. J. Heckman Equation

2. J. Hattie Findings

3. Input-Output put Fallacy

**4. Creativity Response**

- Exercise and Cognition
- Mindfulness - IT
- Rest and Sleep - 7/24
- Multi-sensory learning - digital learning
- Social Competence - Competitiveness
- Nutrition and Supplements - Neuro-enhancement



# The Big Five: The science gap in educational reforms

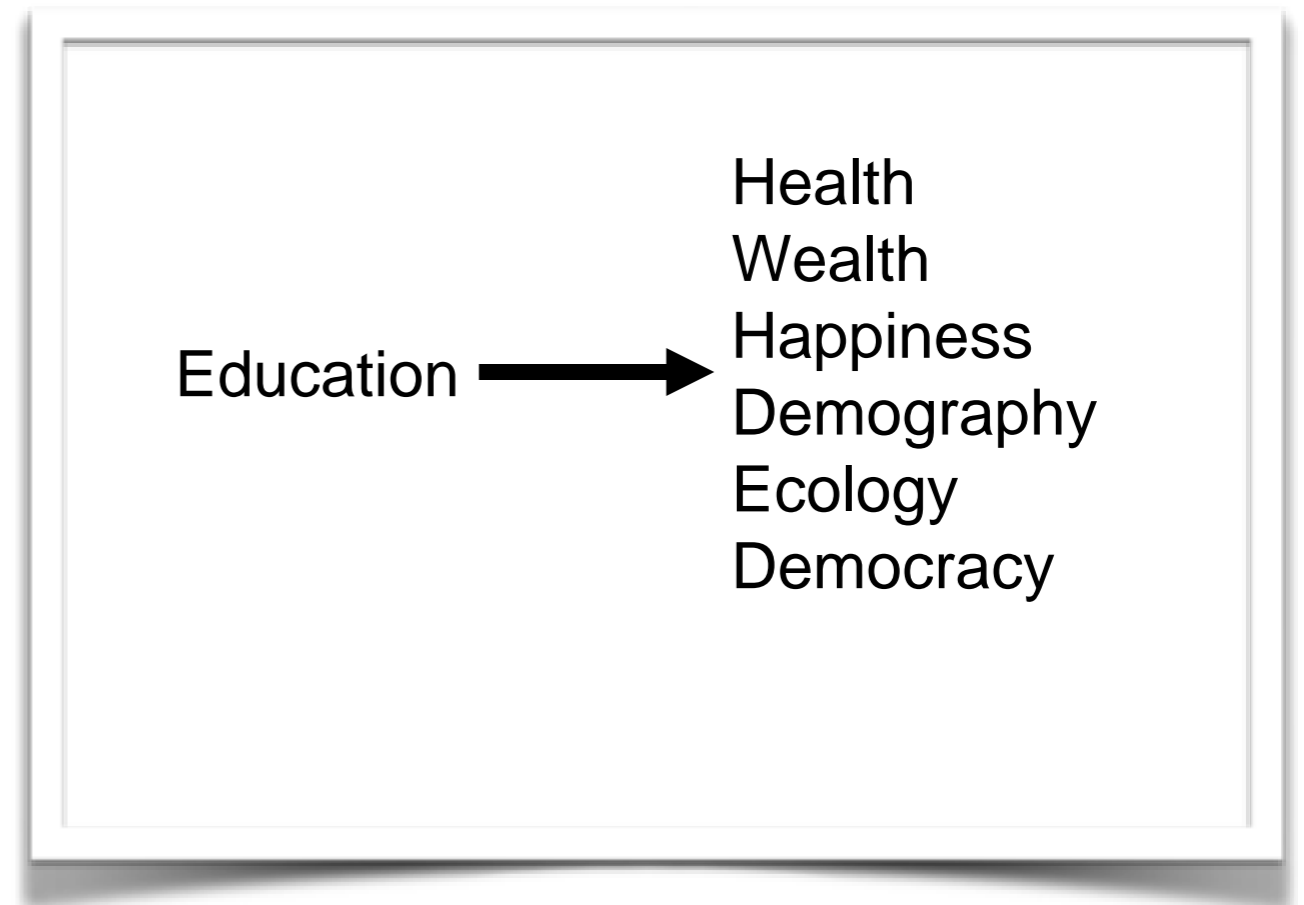
1. J. Heckman Equation

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4. Creativity Response

**5. The Causal Link**



## **Conclusion:**

We can not not learn

Learning ain't Education / Creativity

Cognitive versus Non-cognitive Factors

Psychology and Life-Style changes required

Science makes the difference