



IGNITING CHANGE

EQUITY

EXCELLENCE

AND

INNOVATION

IN EDUCATION



@4GBROTTO



@5GBROTTO

GIANCARLO BROTTO







IGNITING CHANGE

EQUITY

EXCELLENCE

AND

INNOVATION

IN EDUCATION



@4GBROTTO



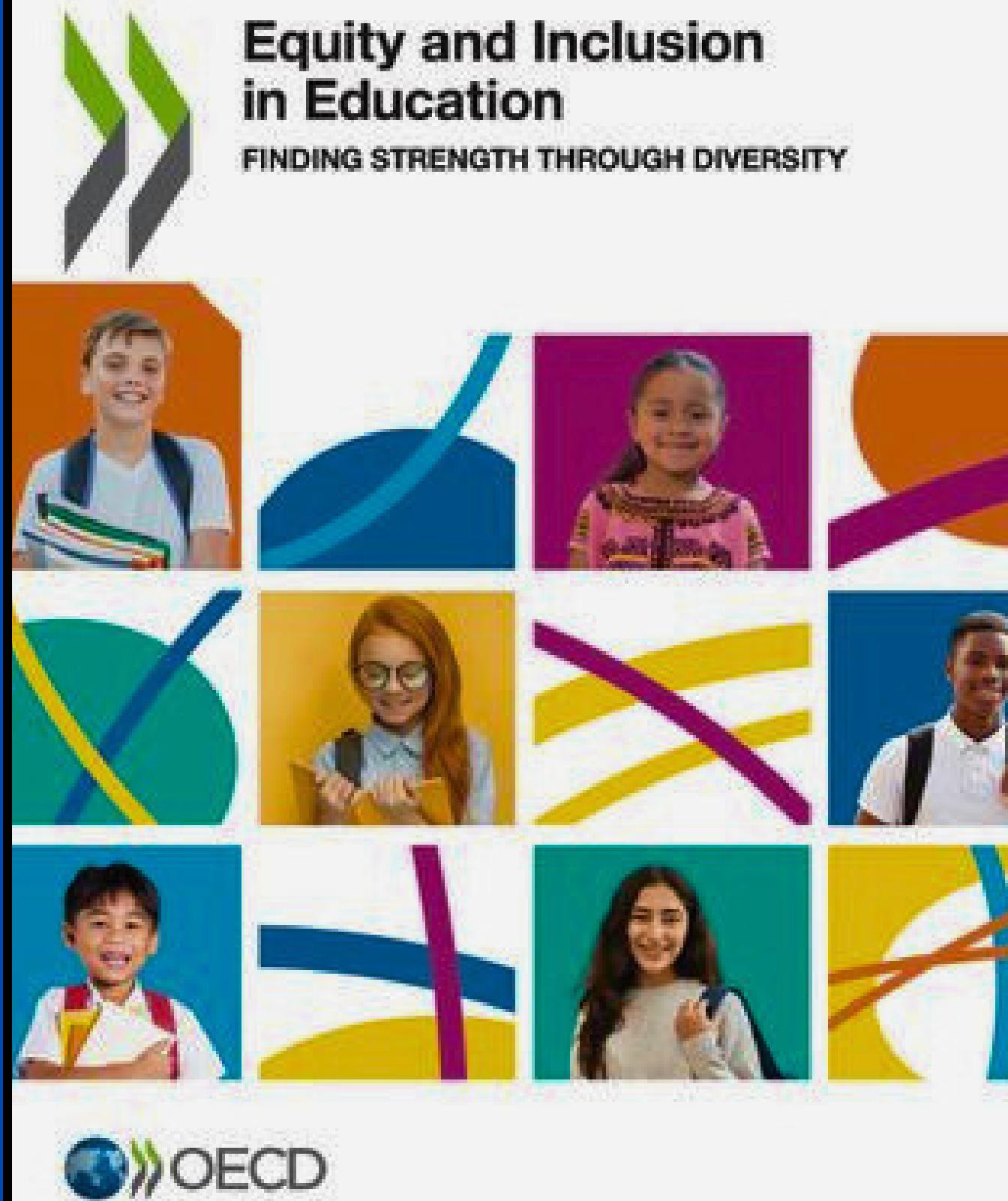
@5GBROTTO

GIANCARLO BROTTO

What is EQUITY ?



How countries define equity



Differences
For all
Equality of opportunity
Obstacles
Achievement
Free
Groups
Barriers
Potential
Belonging
Gaps
Segregation
Access
Discrimination
Exclusion
Diversity

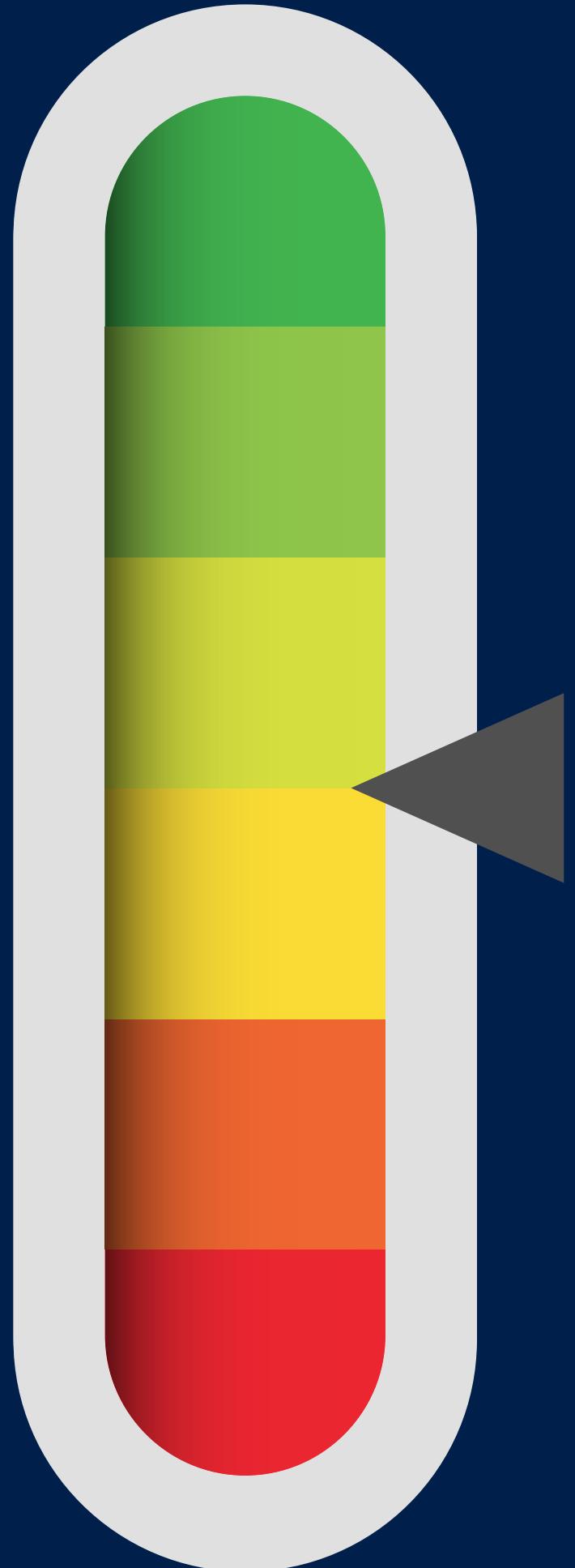
Equity

“There can be numerous reasons why some students perform better than others, but the performance differences should not be the result of the conditions of students’ background . . . socio-economic status, gender, immigrant background . . .”

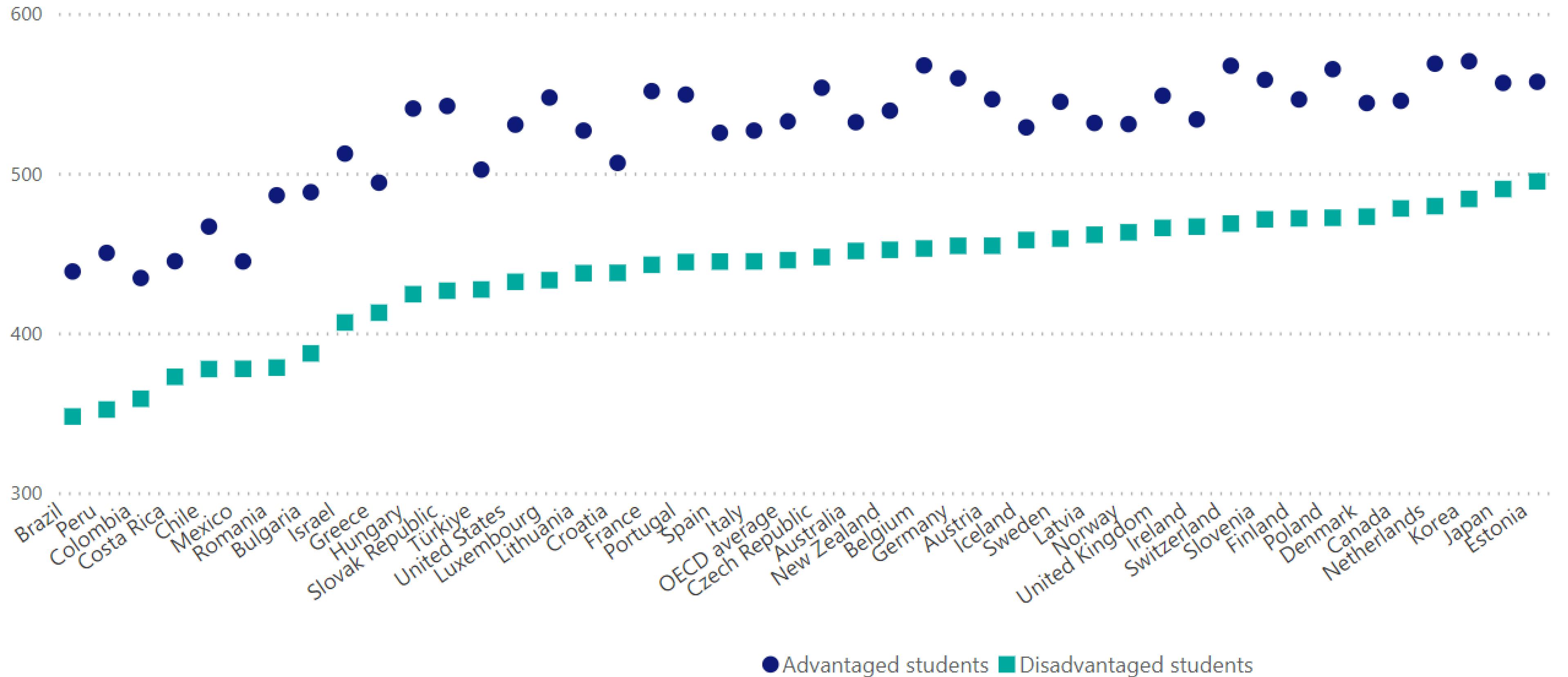


How are we doing ?





Score in mathematics at age 15 (2018)



● Advantaged students ■ Disadvantaged students

Score in reading at age 15 (2018)

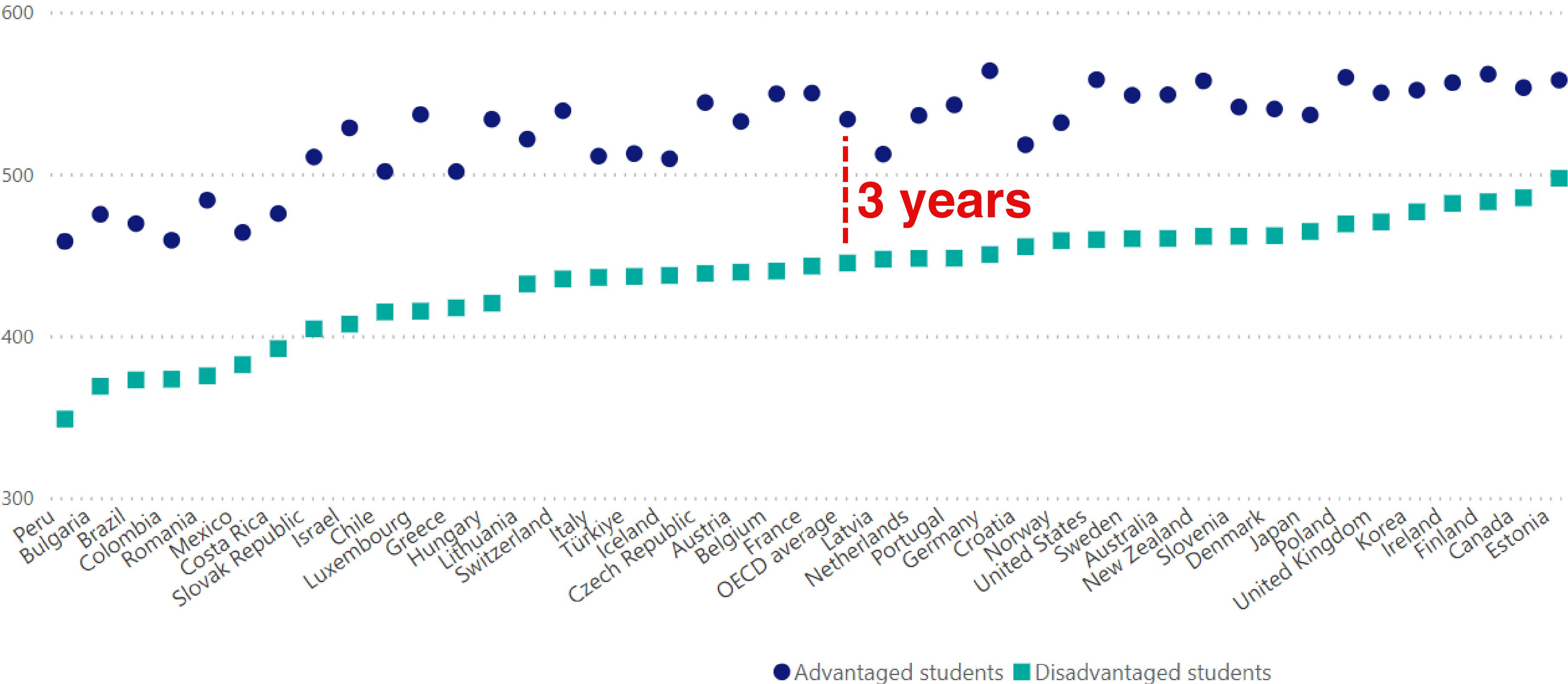
≡ E

600

500

400

300



● Advantaged students ■ Disadvantaged students

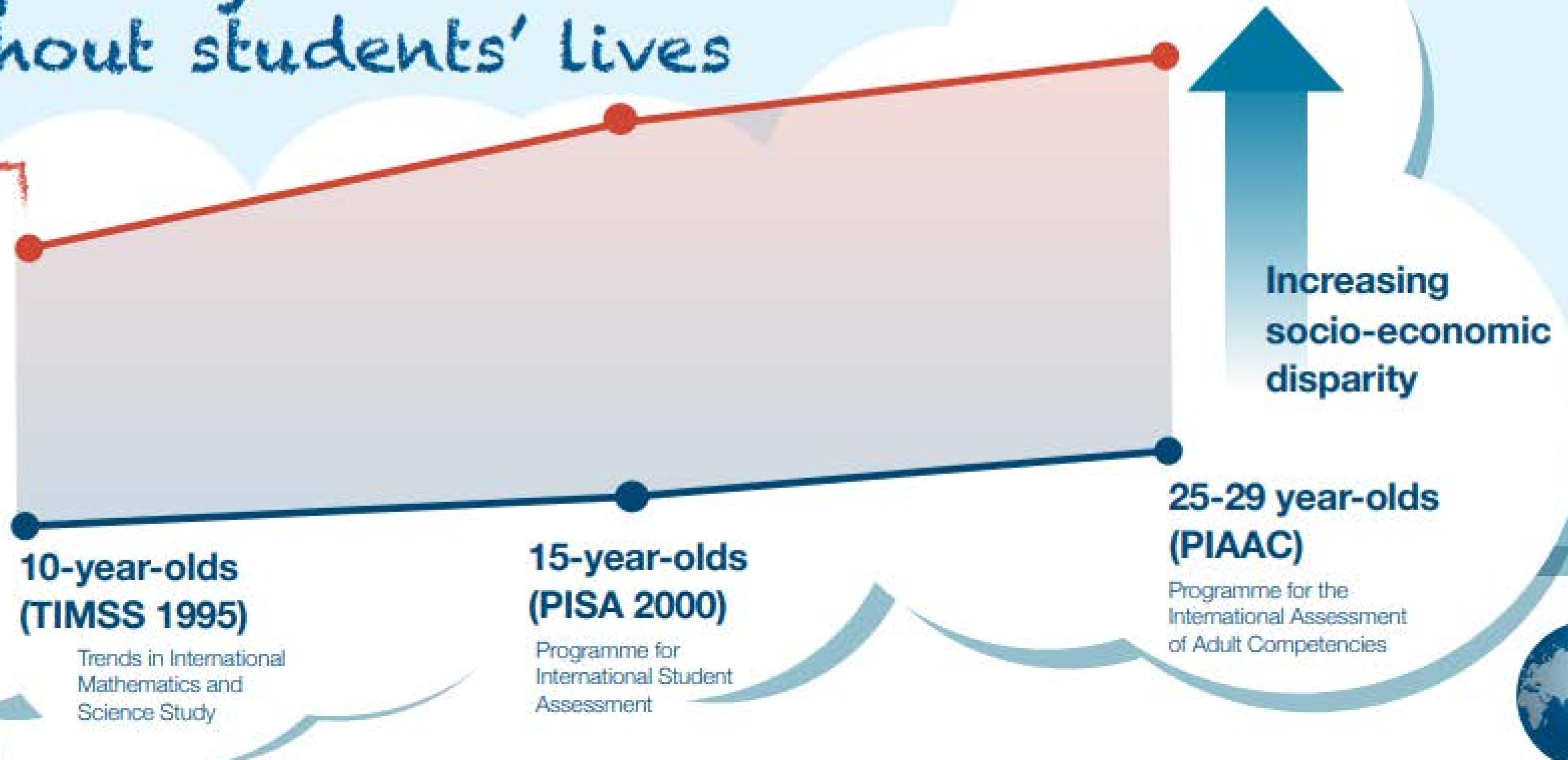
develop early and widen throughout students' lives



advantaged



disadvantaged



Increasing
socio-economic
disparity

**25-29 year-olds
(PIAAC)**

Programme for the
International Assessment
of Adult Competencies

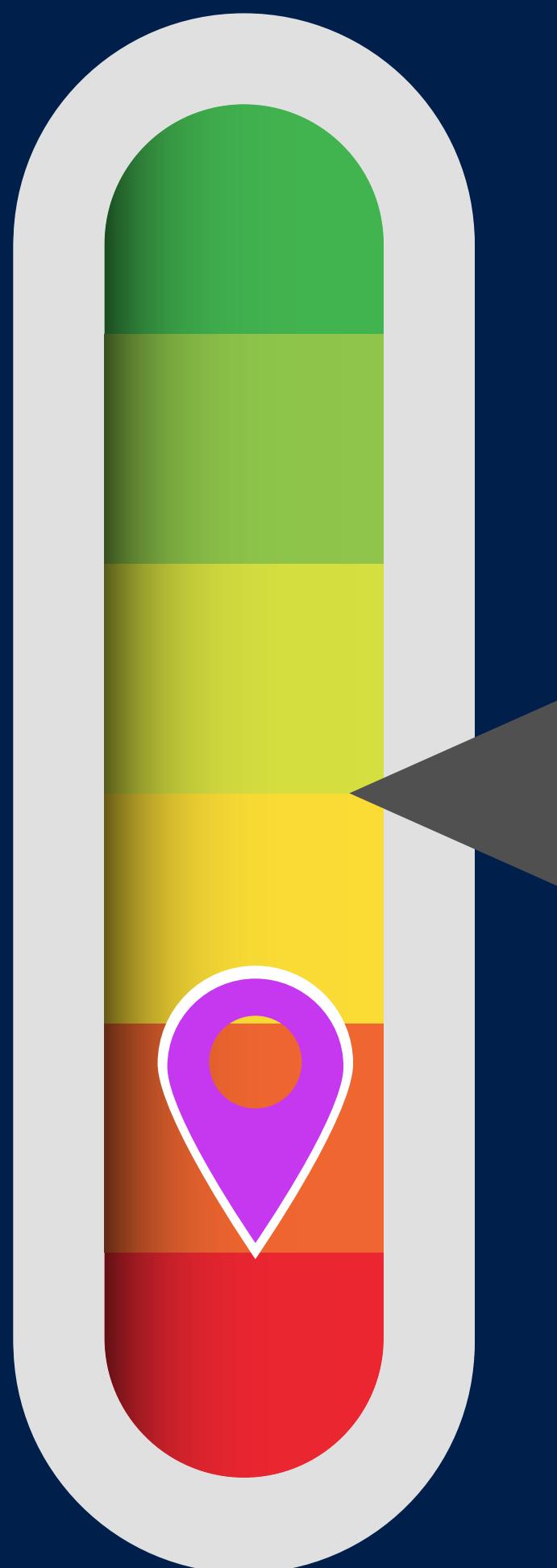
**15-year-olds
(PISA 2000)**

Programme for
International Student
Assessment

**10-year-olds
(TIMSS 1995)**

Trends in International
Mathematics and
Science Study







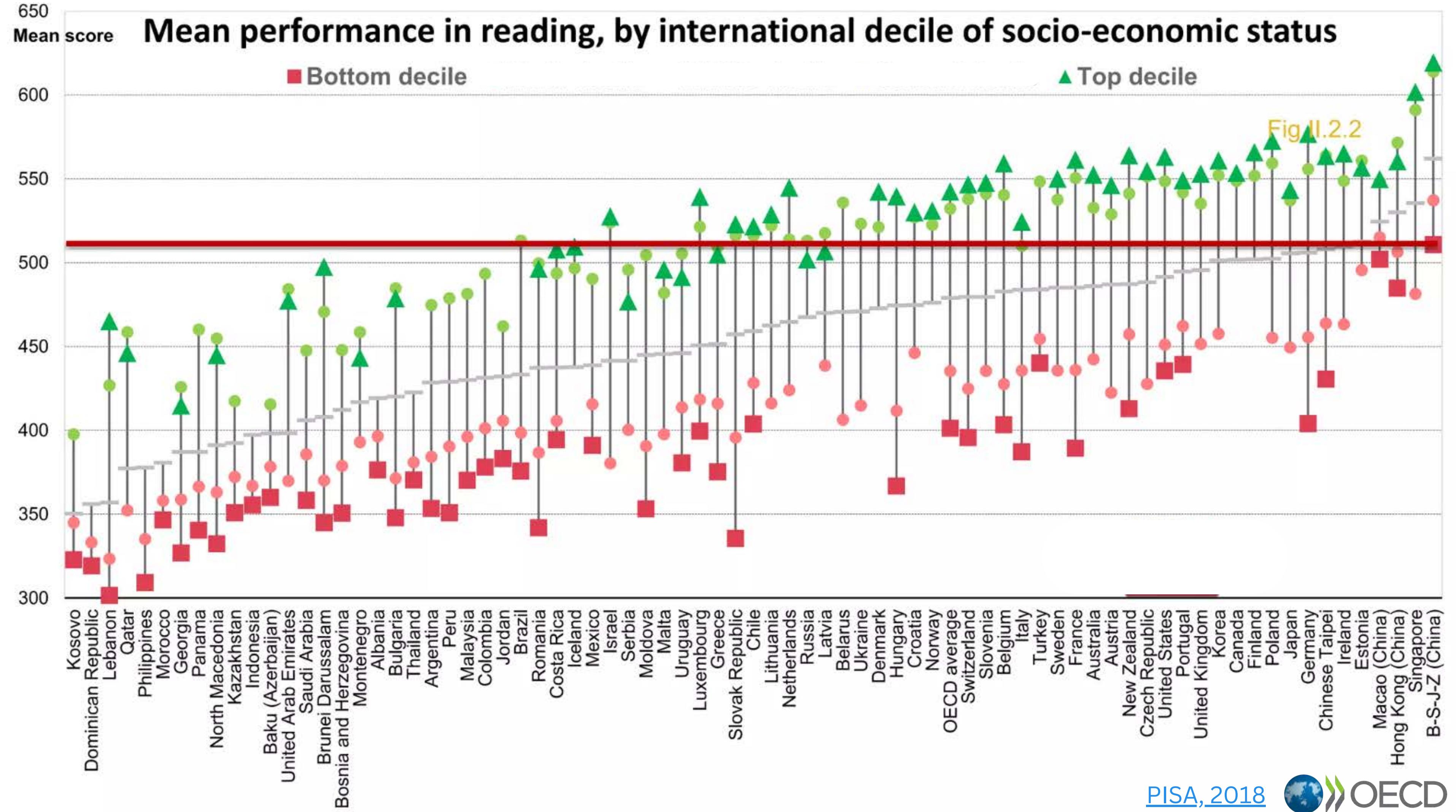


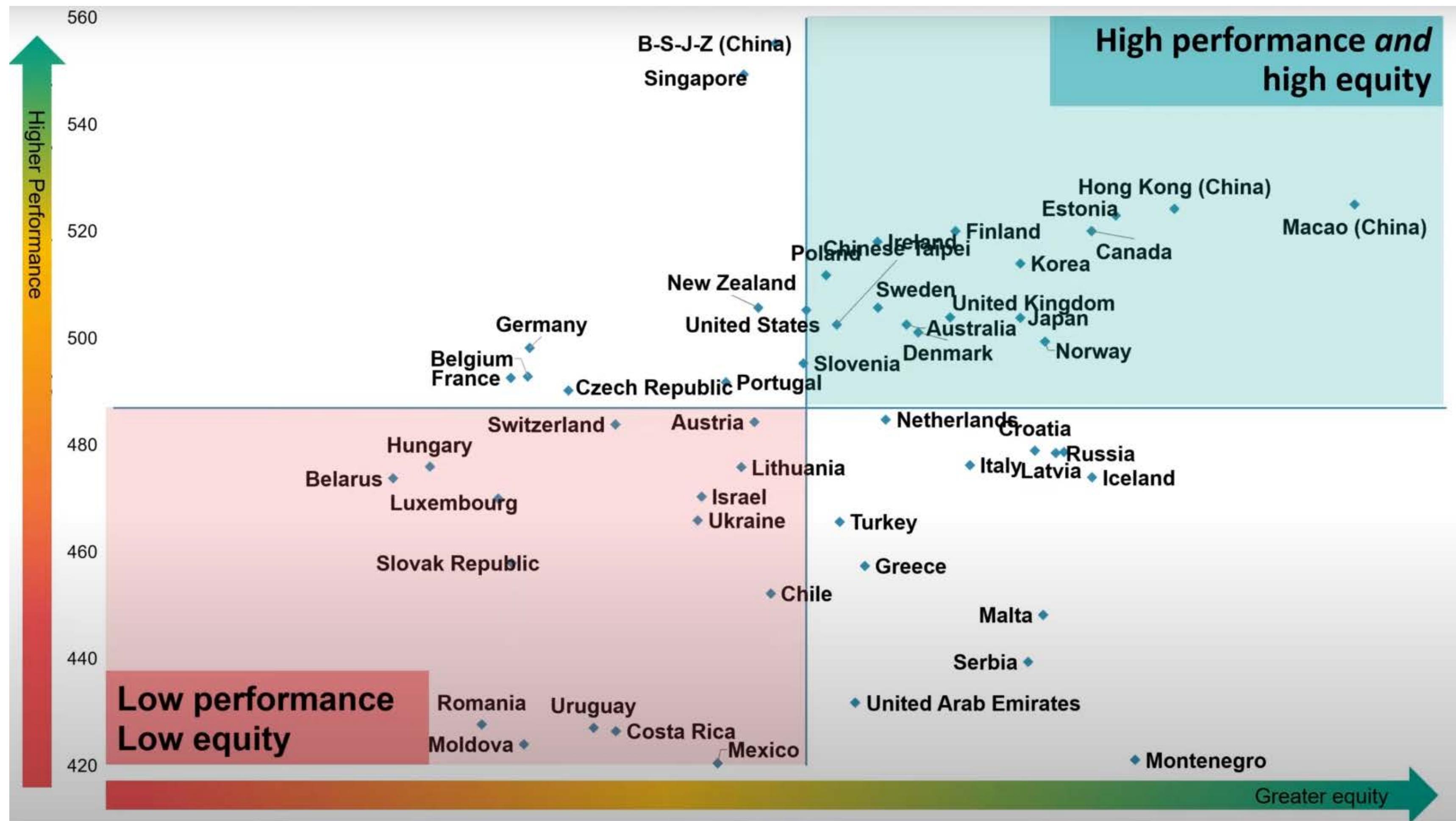
How are we doing ?



What can we do ?

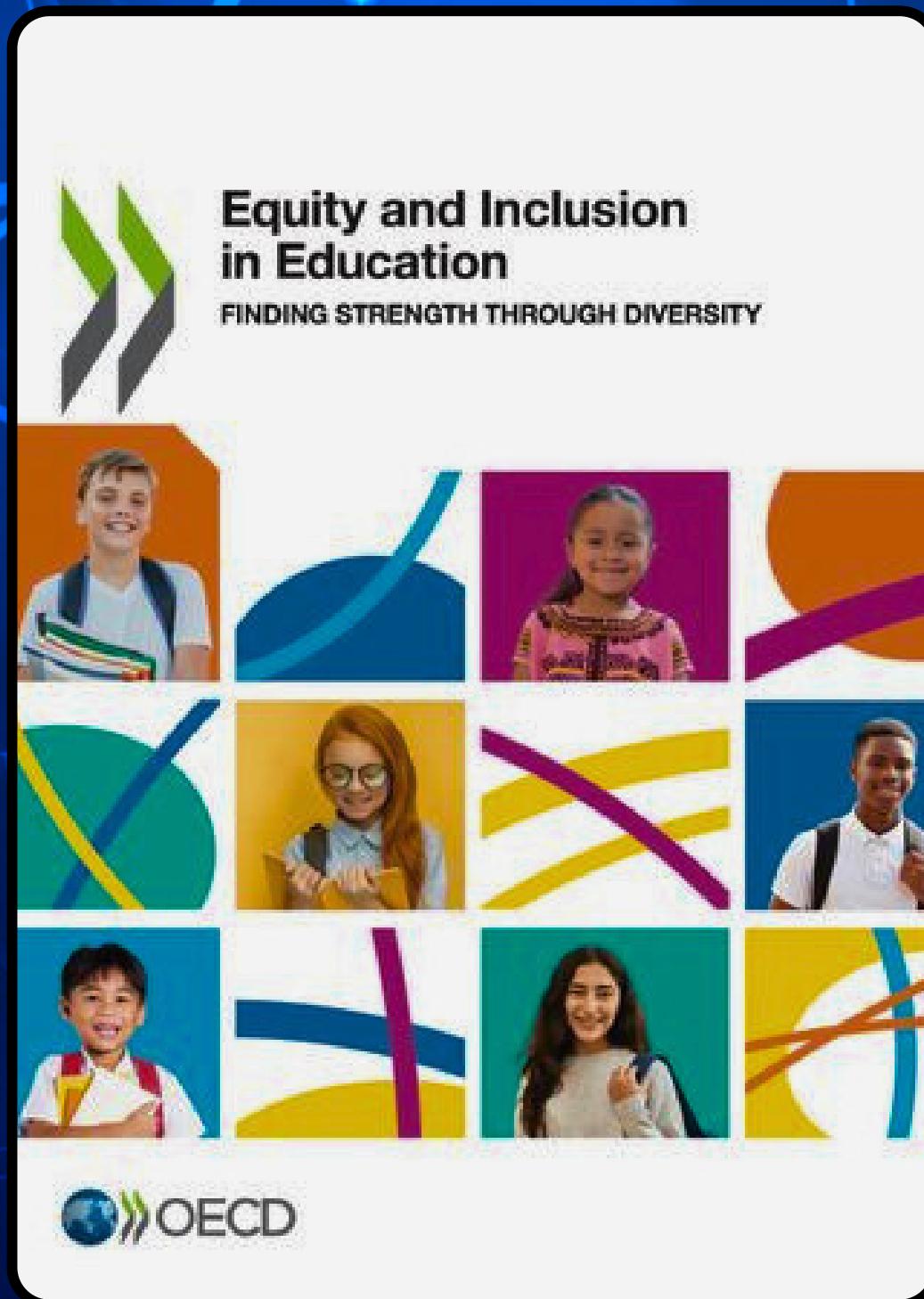






What can we do ?

School-level Interventions



Learning Strategies



Engagement with Parents

School Climate

Non-instructional Supports

What can we do ?



Learning
Strategies



Engagement
with Parents

School
Climate



Non-instructional
Supports

What can we do ?



Learning
Strategies

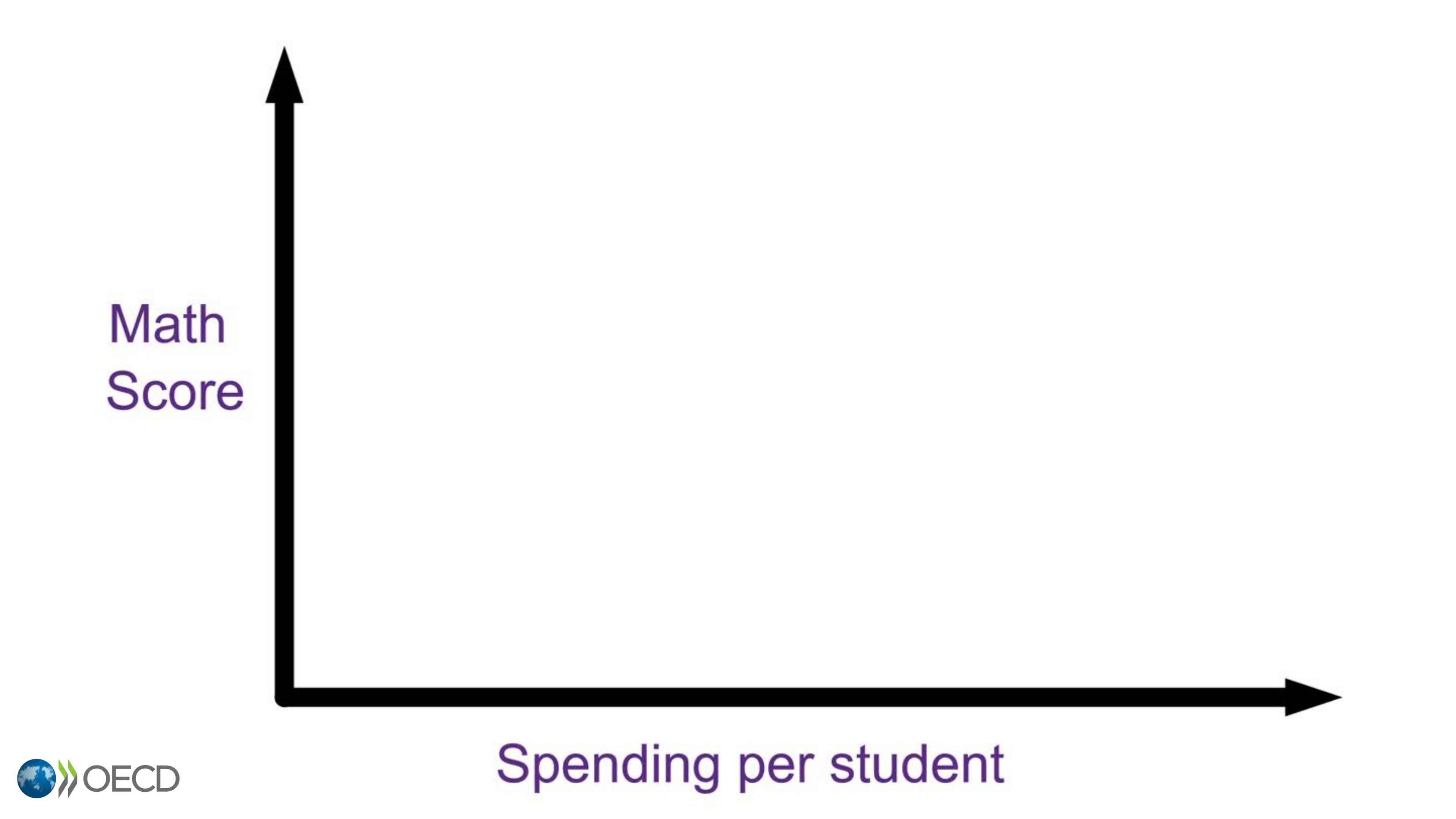


Engagement
with Parents

School
Climate



Non-instructional
Supports

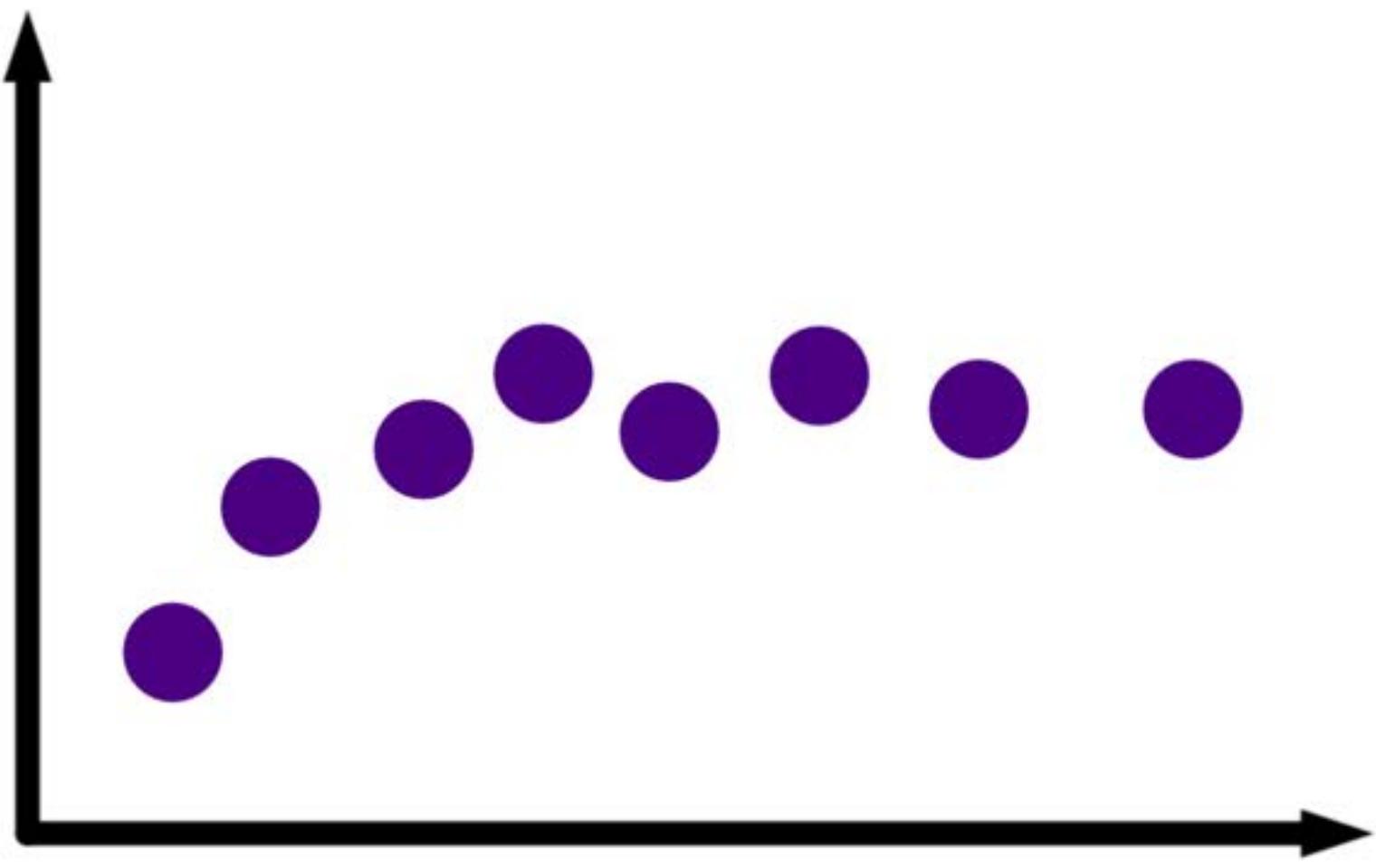


Math
Score

Spending per student

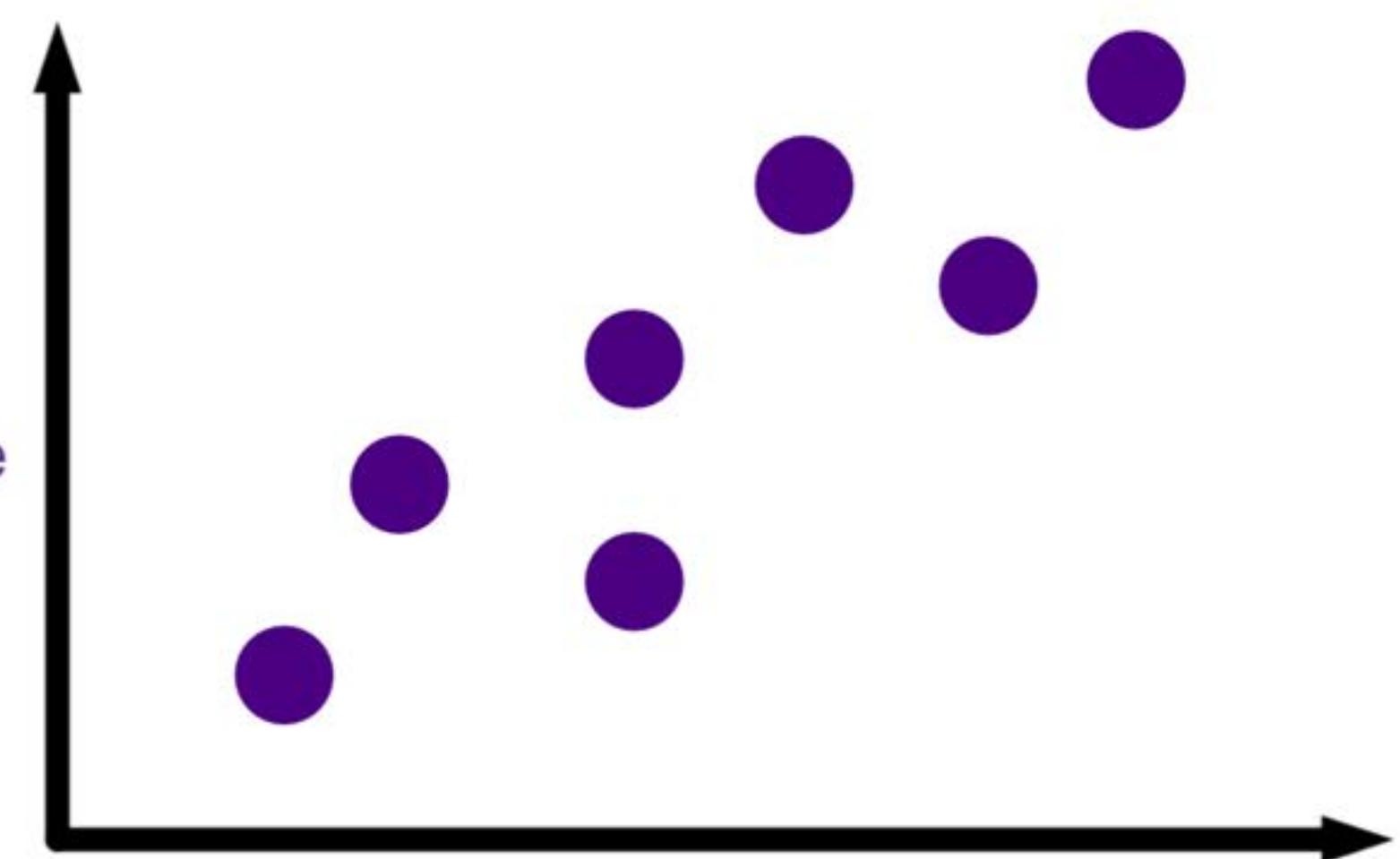
Math
Score

Spending per student



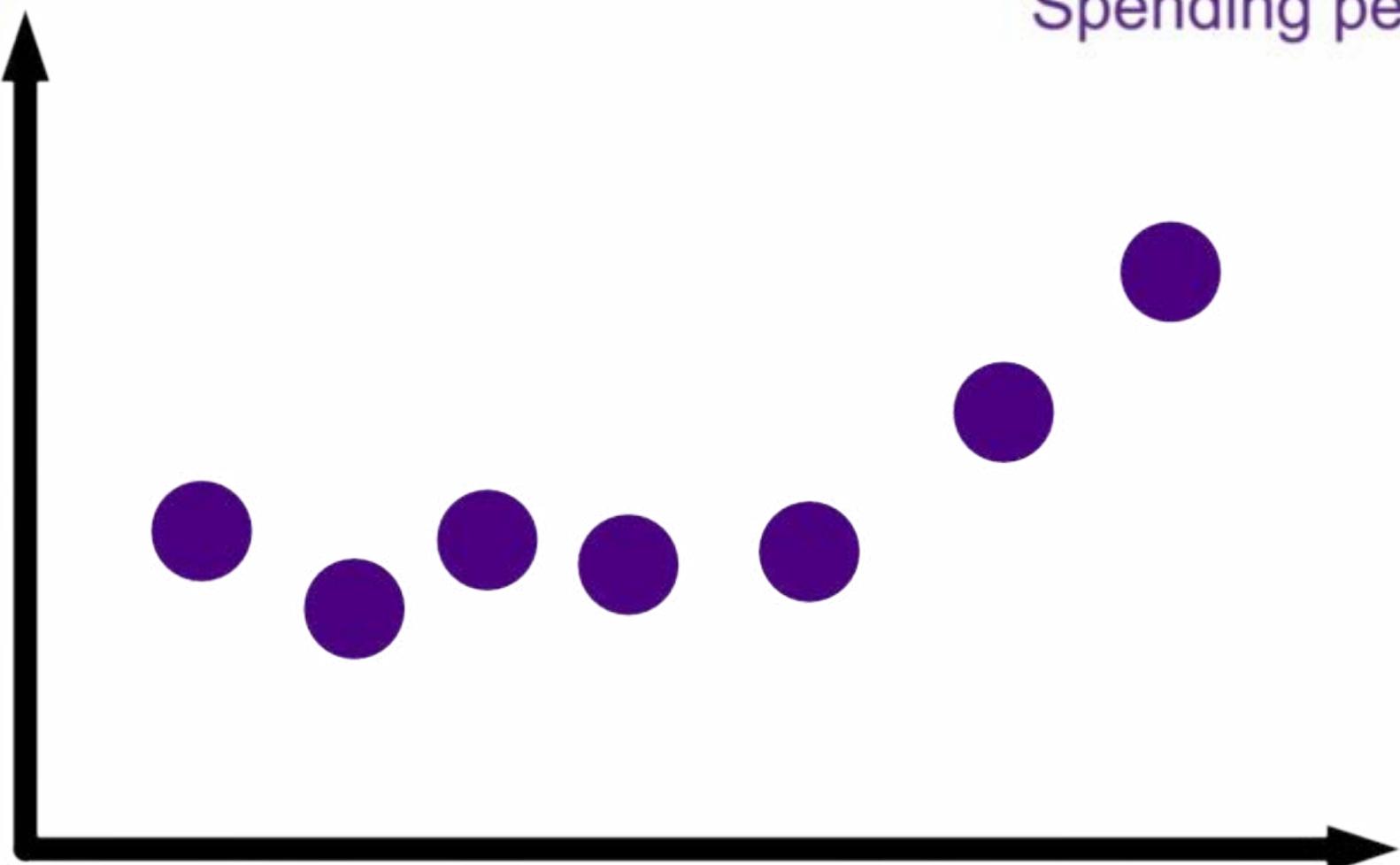
Math
Score

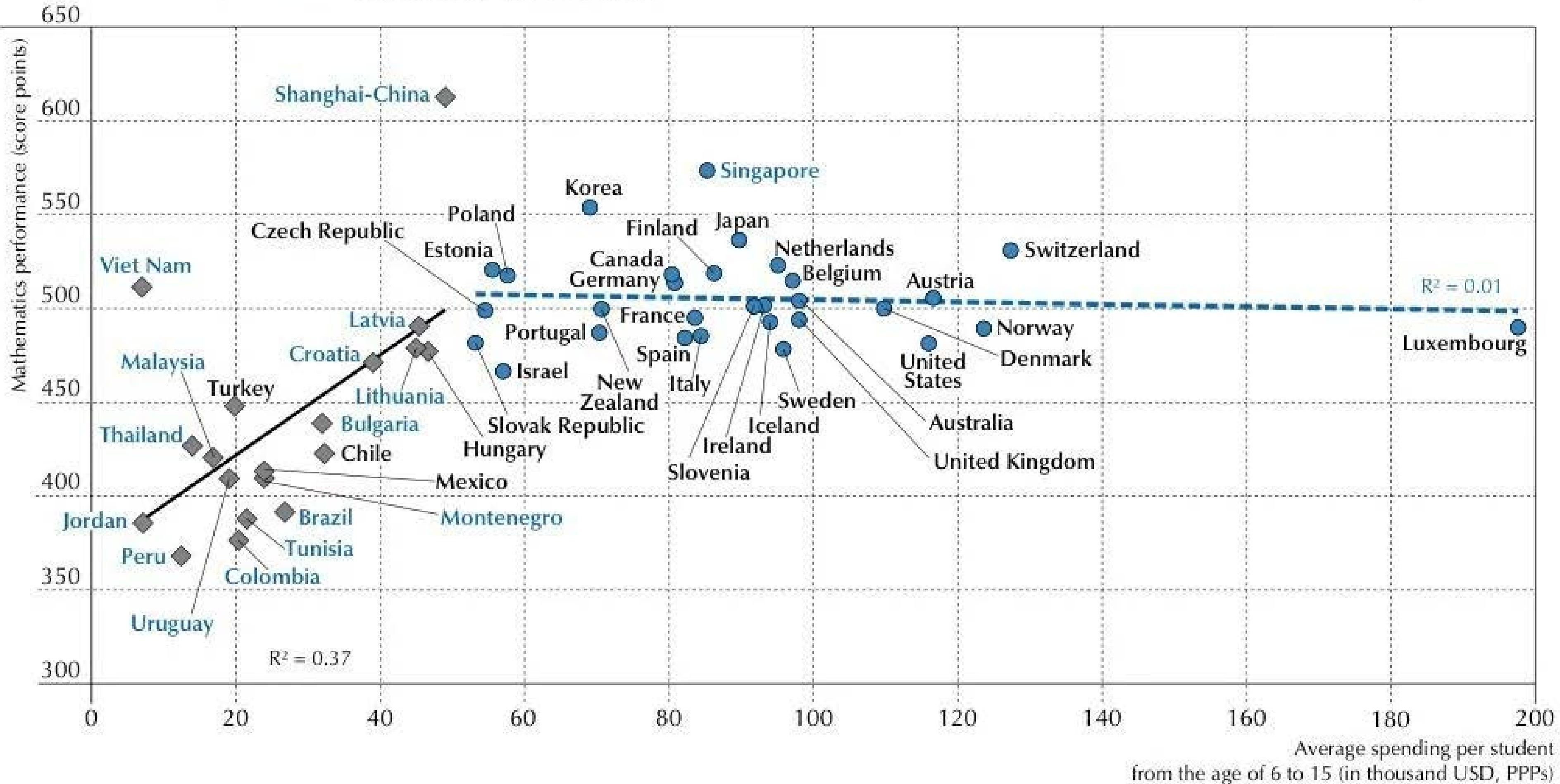
Spending per student



Math
Score

Spending per student





What can we do ?



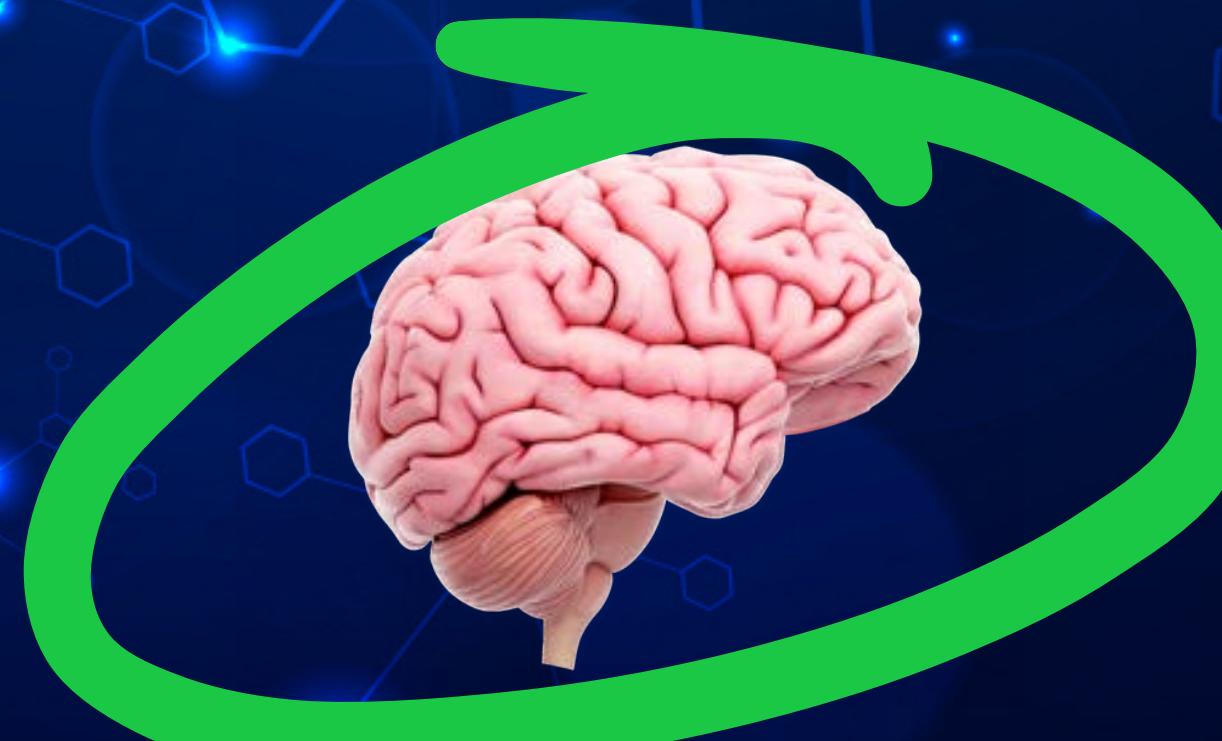
Learning
Strategies



Non-instructional
Supports

Engagement
with Parents

School
Climate



What can we do ?



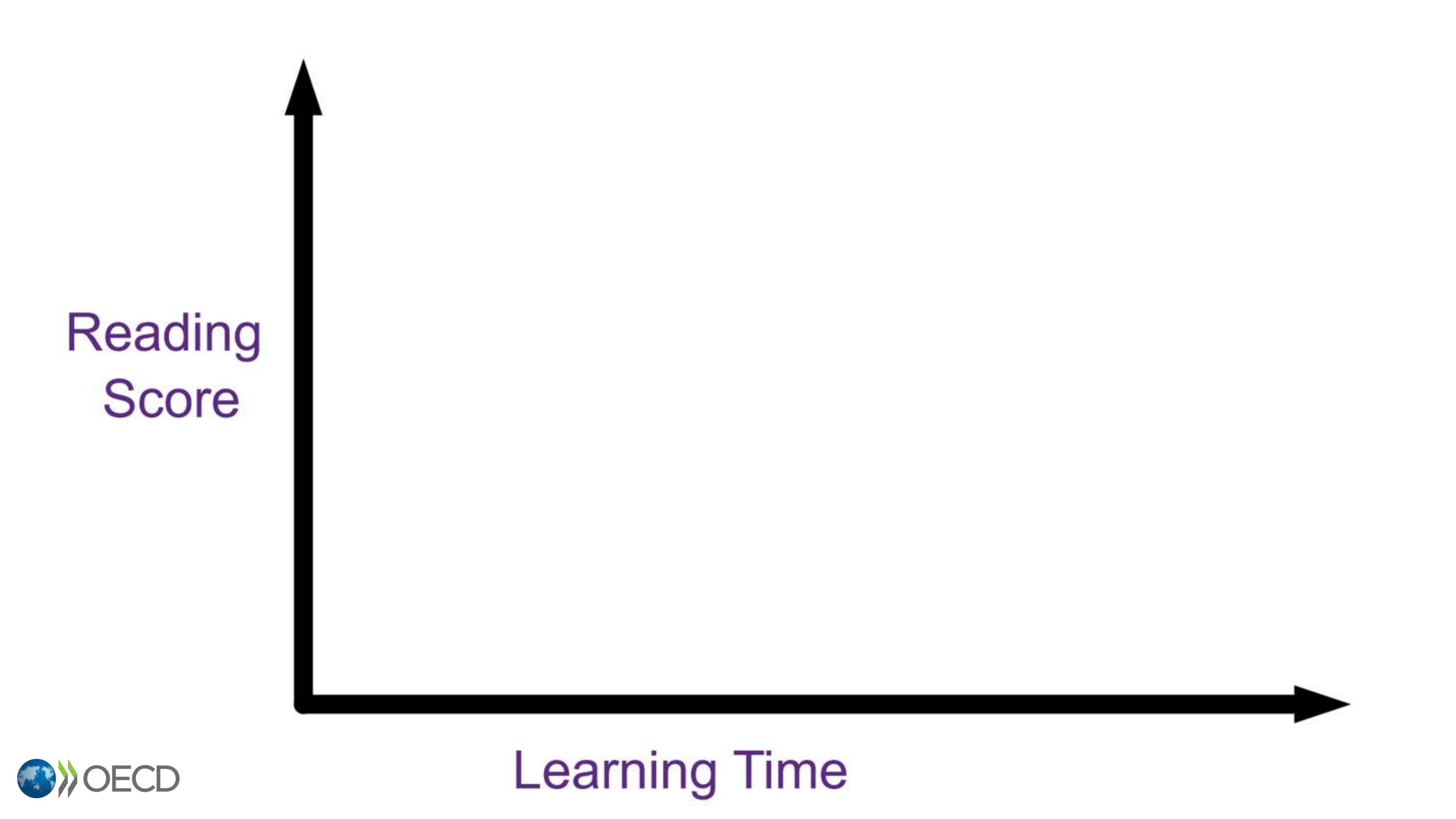
Learning
Strategies



Engagement
with Parents

School
Climate

Non-instructional
Supports



Reading
Score

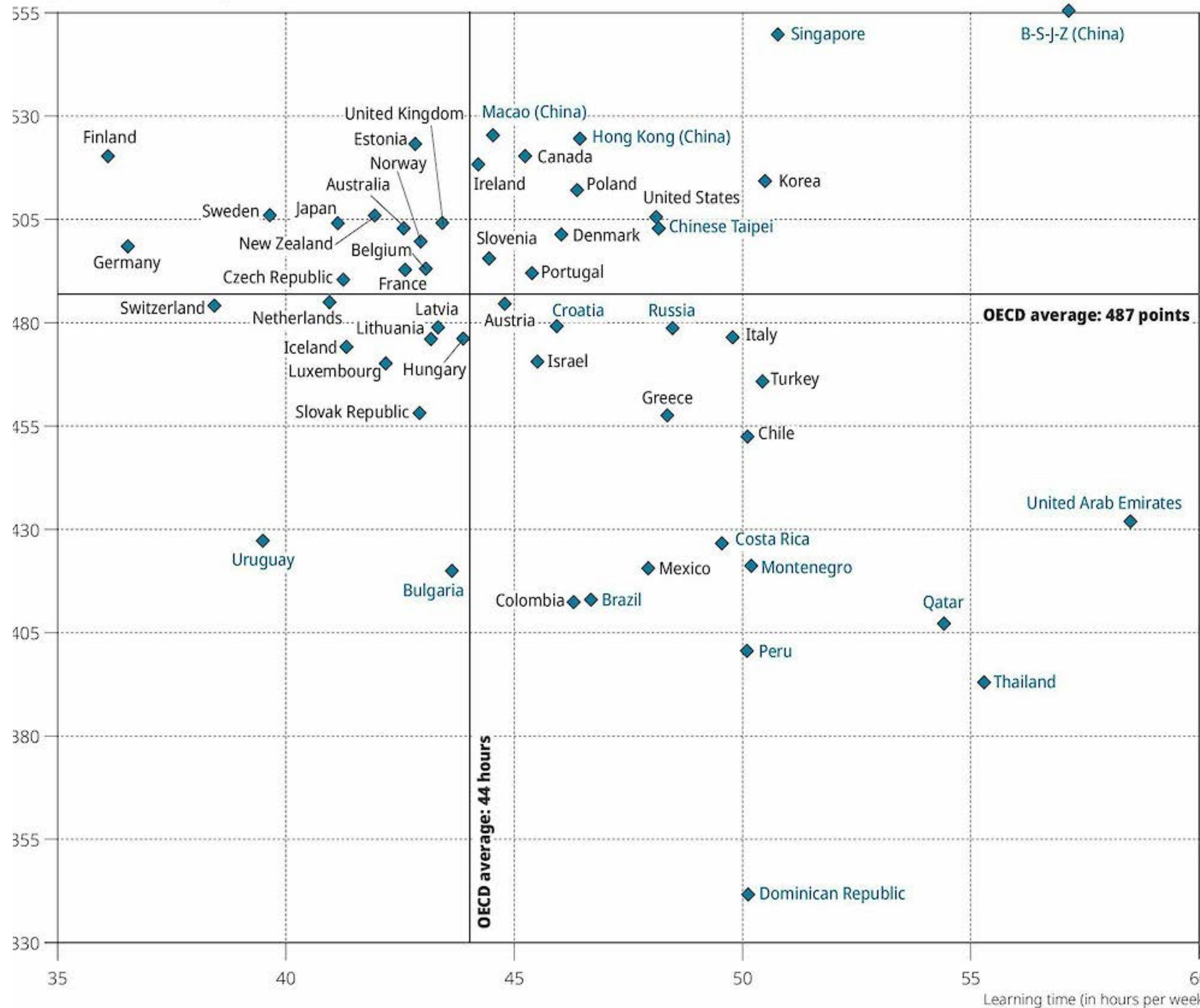
Learning Time

Reading
Score



Learning Time

Average performance in reading (in score points)



What can we do ?



What can we do ?



Learning
Strategies



Engagement
with Parents

School
Climate

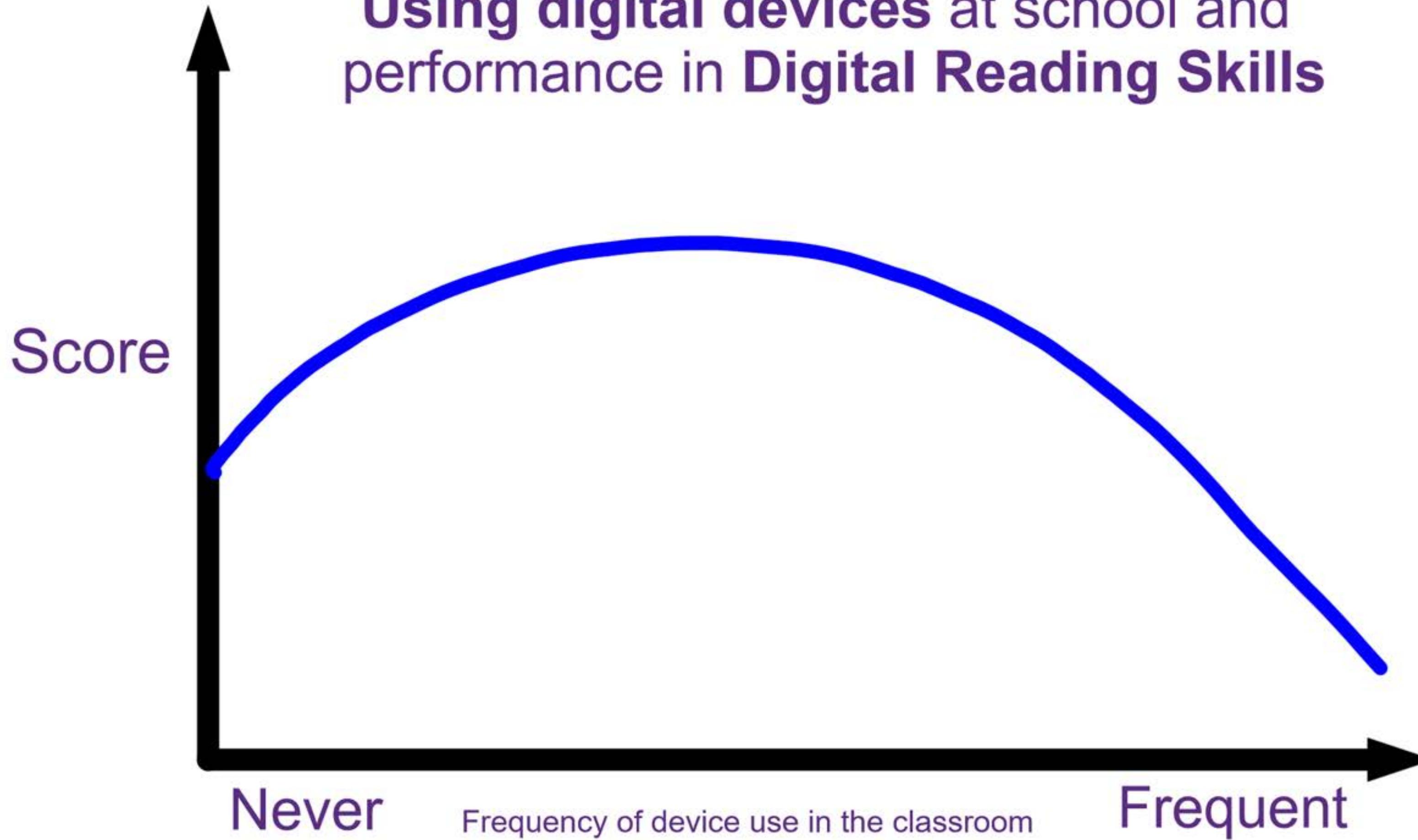


Non-instructional
Supports

Using digital devices at school and performance in Digital Reading Skills



Using digital devices at school and performance in **Digital Reading Skills**



What can we do ?



Why does this happen ?





What can we do ?

BE UNCOMFORTABLE



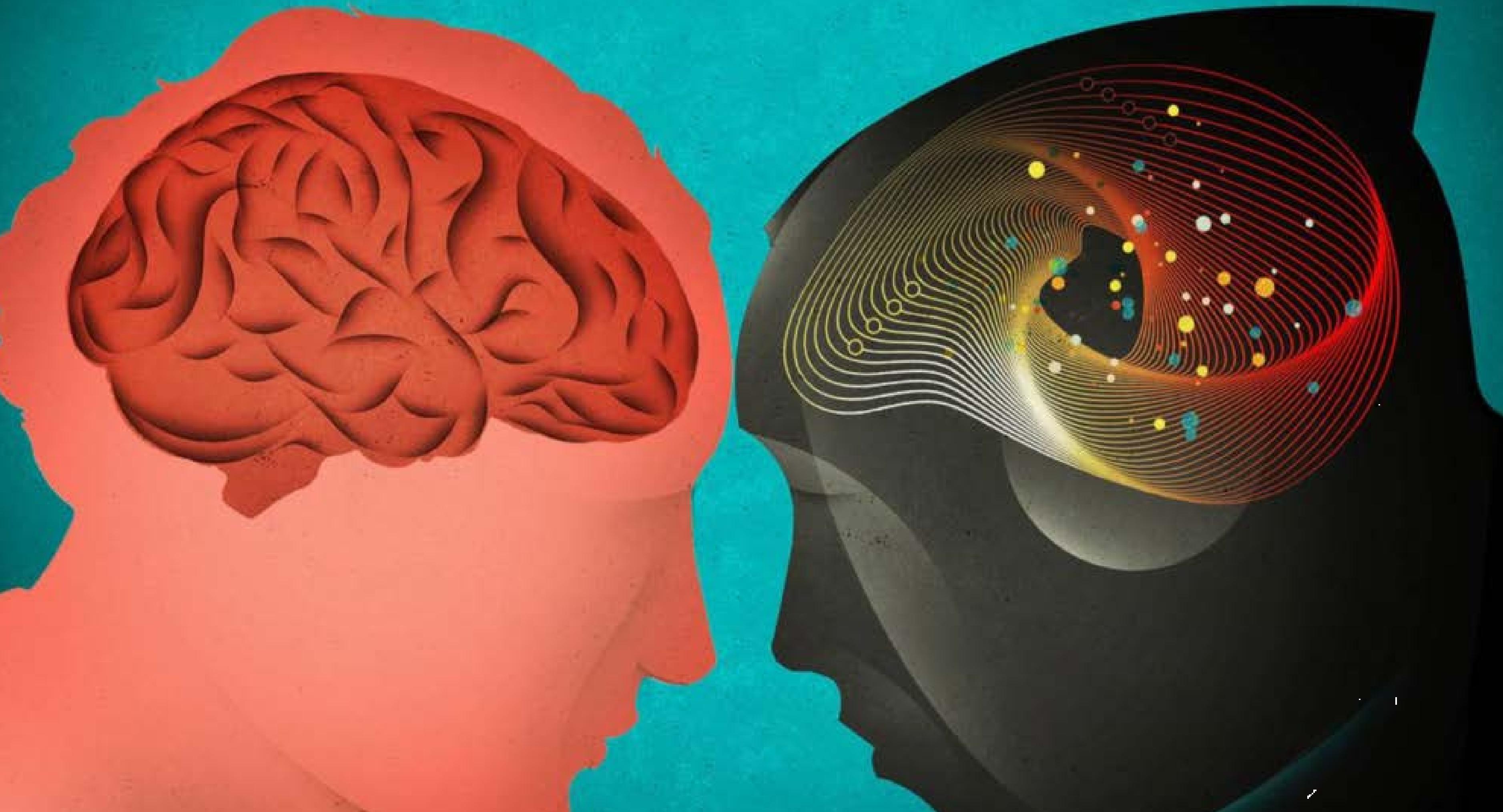
Learning
Strategies

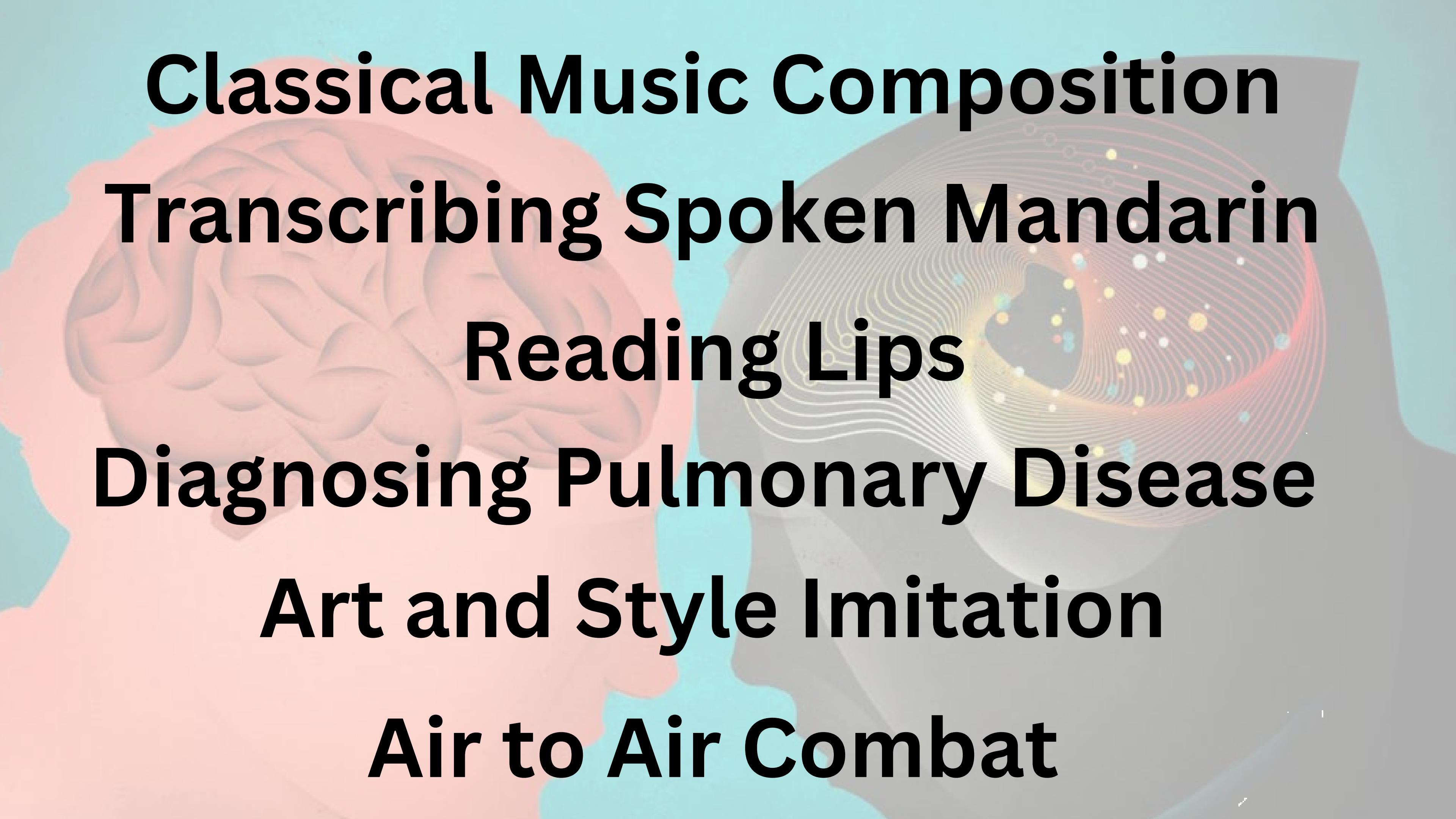


Non-instructional
Supports

Engagement
with Parents

School
Climate



The background features a stylized illustration of a human brain and heart. The brain is on the left, depicted in shades of pink and red, with a glowing blue energy field around it. The heart is on the right, shown in grey and white, with concentric circular lines and small colorful dots (yellow, blue, green) representing energy or particles. The overall aesthetic is futuristic and medical.

Classical Music Composition

Transcribing Spoken Mandarin

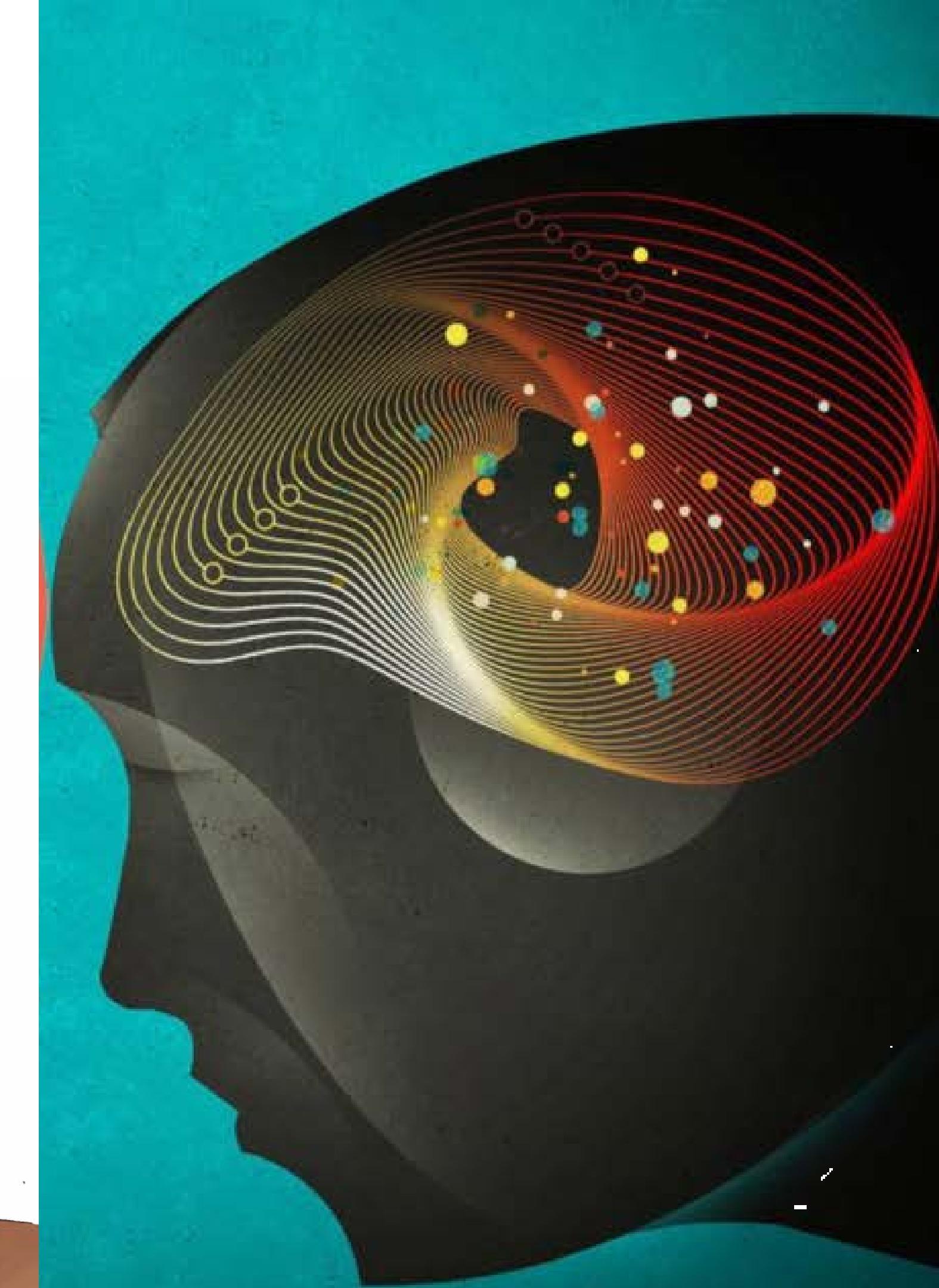
Reading Lips

Diagnosing Pulmonary Disease

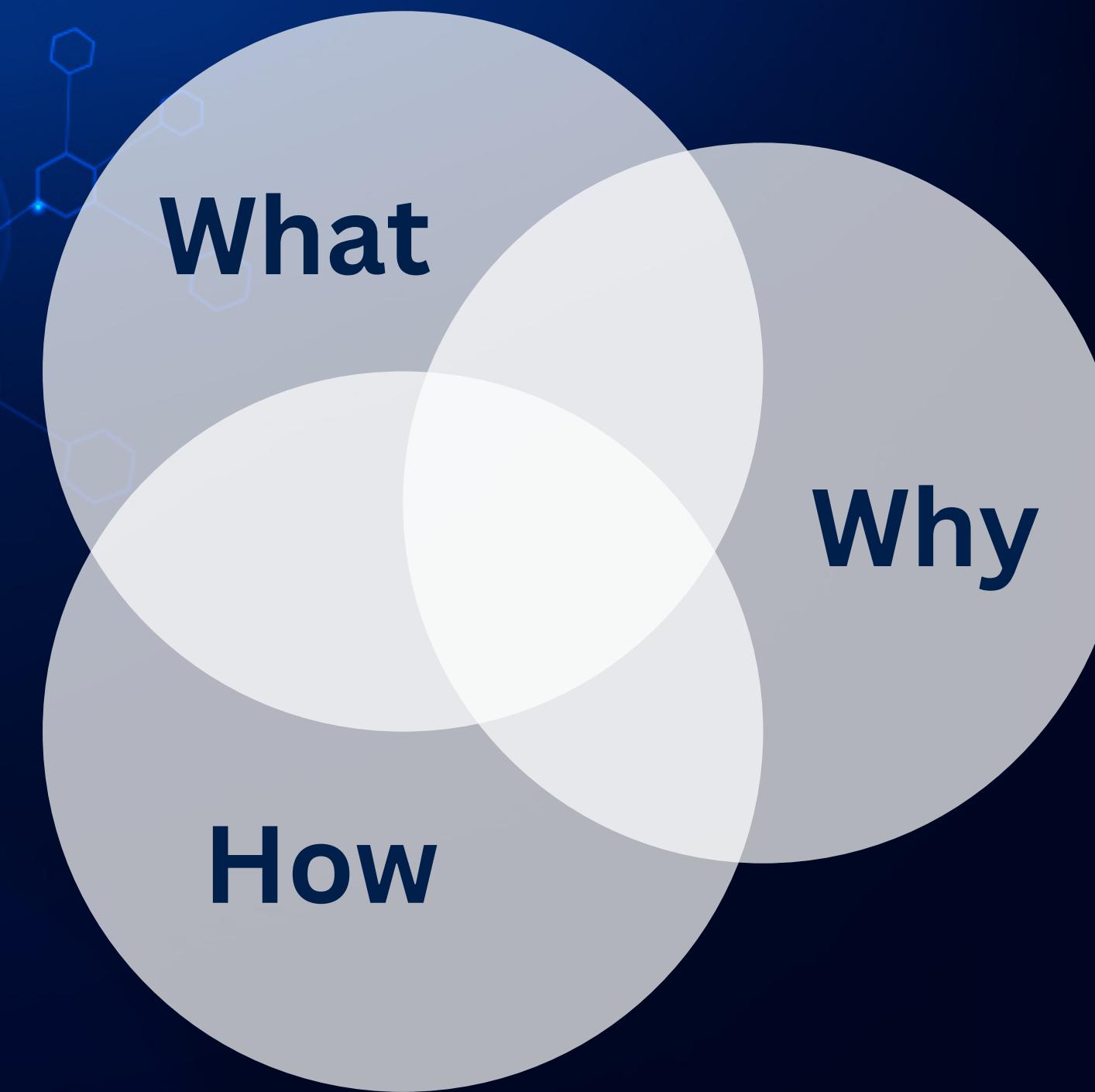
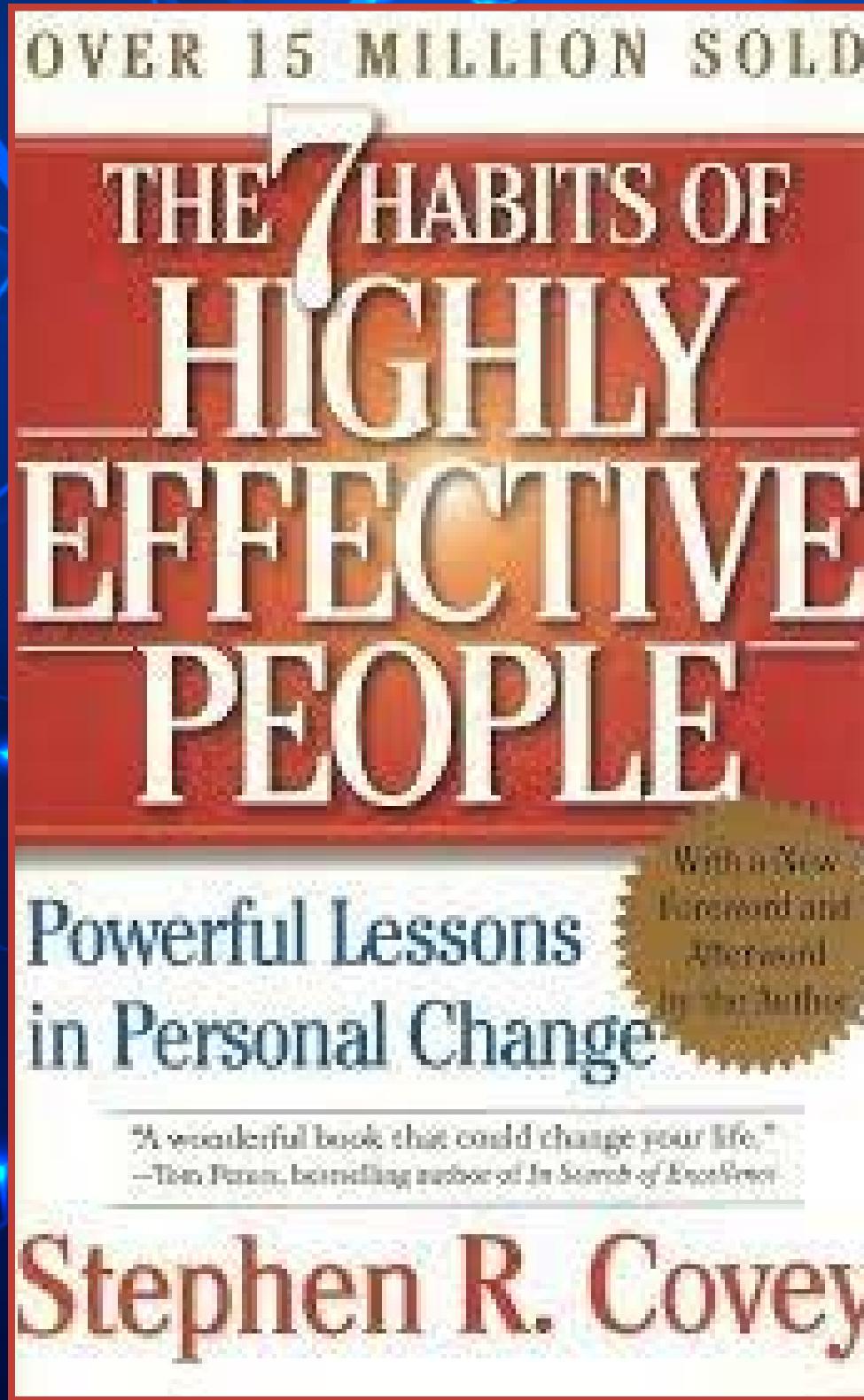
Art and Style Imitation

Air to Air Combat

**If AI could do it all,
what would you
have it do ?**

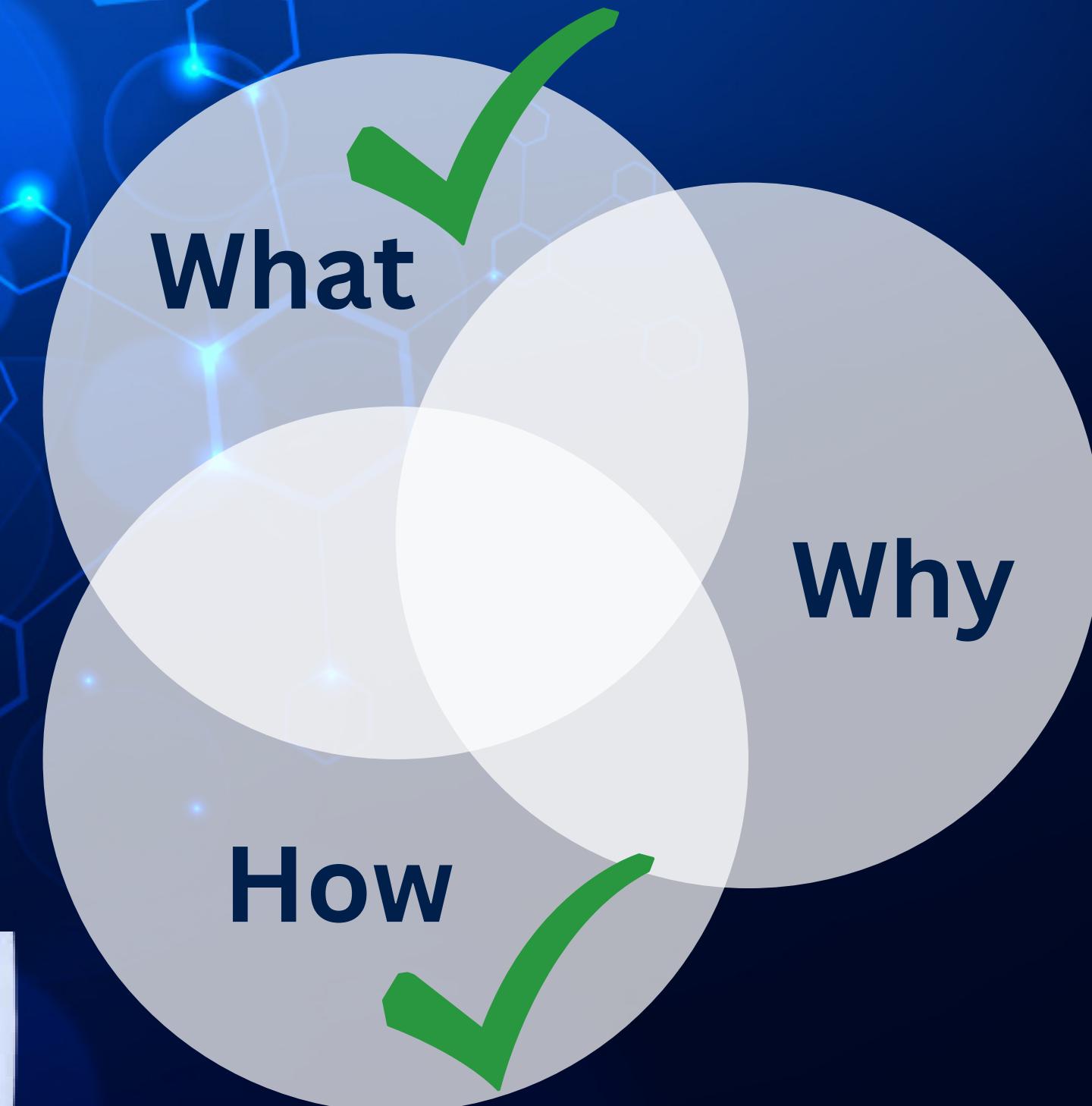


What can we do ? New Behaviours



What can we do ?

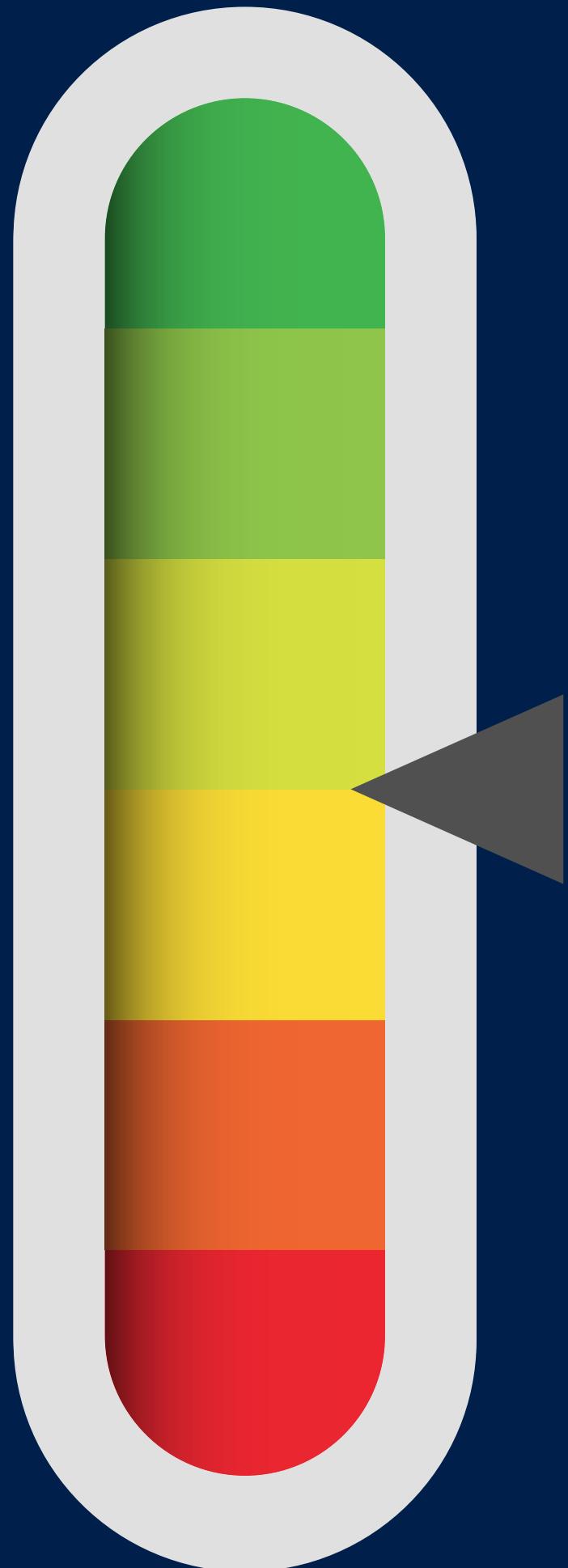
New Behaviours



Beliefs



What do you believe ?



True Story . . .



imposte, *n.* *to* collect or exact, as a tax, toll, etc.
im-pel (*im-pel'*'), *v.t.* impelled; impelling; to drive forward; force; compel; *as*, fear and remorse impelled him to confess.

im-pend (*im-pen'd*), *v.t.* *to* overhang; *as*, the sword hanging over Desdemona's head; *to* be at hand; threatening; *as*, death impending.

im-pen-e-trable (*im-pen'e-trə-bl*), *adj.* *not* capable of being entered; allowing no entrance or passage; impenetrable; *as*, an impenetrable forest wall; *2*, not capable of being understood; used only in the third person; *as*, *we*, *an* impenetrable plot; *3*, closed to reason, sympathy, etc.

im-pen-i-tent (*im-pen'i-tənt*), *adj.* not sorry or repentant for one's sins; a hardened sinner.—*n.* **im-pen'i-tence**.

im-per-a-tive (*im-pur'a-tiv*), *adj.* *1*, in grammar, expressing commanded or exhortation; *as*, the imperative mood; *2*, commanding; peremptory; authoritative; *as*, an imperative gesture of command; *3*, necessary; urgent; *as*, it is imperative to leave at once.—*n.* *in* proportion; the mood expressing command; also, the form of a verb used in this mood.

im-per-cep-tible (*im'per-sep'tibl*), *adj.* *1*, so small, slow, or gradual, as hardly to be seen or felt; *as*, the imperceptible growth of a plant from day to day; *2*, too slight to be grasped by the mind; subtle; *as*, imperceptible shades of meaning.—*n.* **im'per-cep'tibl**.

im-per-fect (*im-pur'fikt*), *adj.* lacking perfection; faulty; incomplete.—*n.* *imperfect tense*, a tense of a verb which indicates action in the past going on but not completed; *as*, he was walking.—*n.* *the imperfect tense*, *or* a verb in that tense.—*adv.* **im-per-fectl**.—*n.* **im-perfection**.

im-pe-ri-al (*im-pur'i-əl*), *adj.* *1*, pertaining to an empire or an emperor; *as*, imperial policies; imperial majesty; *2*, splendid; magnificent.—*n.* *a* small jeweled board.—*adj.* **im-pe'ri-al**.

im-pe-ri-al-ism (*im-pur'i-əl-izm*), *n.* *1*, the power or government of an emperor; *2*, the policy of any nation which aims at the acquisition of new territories and, usually, closer union of the territories already possessed.—*adj.* **im-pe'ri-al-is-tic**.—*n.* **im-pe'ri-al-ist**.

im-pe-ri-l (*im-pur'l*), *v.t.* impelled; impelling; *to* put in danger; *as*, to imperil one's life to save a child.

im-pe-ri-ous (*im-pur'ē-əs*), *adj.* overbearing; urgent.—*adj.* **im-pe'ri-ous-ly**.—*adv.* *Age*; *fire*; *clim*; *date*; *day*; *fire*; *heat*; *old*; *time*; *young*; *year*; *young*.

im-planted (*im-plānt'*), *adj.* *1*, having been transplanted; *2*, *not* naturally growing; *as*, *the* *im-planted* *tree*.

im-planted (*im-plānt'*), *adj.* *1*, *not* naturally growing; *2*, *not* naturally growing; *as*, *the* *im-planted* *tree*.

im-planted (*im-plānt'*), *adj.* *not* relating to any particular person; *as*, *an* *implanted* disease; *not* existing as a person; *as*, *he* *had* *no* *implanted* *father*. **im-planted** *verb*, a verb which usually has *it* for a subject, used only in the third person; *as*, *she* *is* *implanted* *sympathy*. *See* *also* *im-planted*.

im-per-son-a-te (*im-pur'sə-nāt'*), *v.t.* impersonated; impersonating; *1*, to play the part of; *as*, *on* *the* *stage*; *2*, to typify; represent; *as*, *Judea* *represented* *Canada*.—*n.* **im-per-son-a-tion**.—*n.* **im-per-son-a-tor**.

im-per-ti-nent (*im-pur'tē-nənt*), *adj.* incident; rude.—*n.* **im-per-ti-nence**.

im-per-turb-a-ble (*im-pur'tur-bə-bl*), *adj.* calm; serene; not easily excited; *as*, imperurbable temperament.

im-per-vi-ous (*im-pur've-əs*), *adj.* *not* permitting entrance or passage; *as*, stickers are impermeable to water; impermeable to rain.

im-pe-ti-go (*im-pū-tī-gō*), *n.* *a* skin disease characterized by pustules which later become crusty.—*adj.* **im-pe-tig-i-nous**.

im-pe-tu-ous (*im-pet'ü-əs*), *adj.* *1*, pushing with force and violence; *as*, impetuous wind; *2*, acting with sudden energy; passionate; impulsive; *as*, *a* *impetuous* *child*.—*n.* **im-pe-tu-i-ty**.

im-pe-tus (*im-pē-tüs*), *n.* *1*, the force or momentum by which a moving body tends to overcome resistance and go on moving; *2*, a moving force; stimulus; incentive; *as*, the desire for fame is an impetus to action.

im-pe-ti-ty (*im-pē-tē-tē*), *n.* (*pl.* *im-pe-ties*), *1*, lack of religious conviction; *2*, an act of aggression or falsehood.—*adj.* **im-pe-tious**.—*n.* **im-pe-ti-ty**.

im-pinge (*im-ping'*), *v.t.* to strike; impinge; *as*, rays of light impinge on the eye.

im-pish (*im-pish'*), *adj.* mischievous; impudent.—*adj.* **im-pi-ash-ble** (*im-pi-ash'ə-bl*); *adj.* *not* *able* *to* *be* *pitied*; *not* *deserving*; *not* *deserving* *pitifulity*.—*adj.* **im-pi-ash-ly** (*im-pi-ash'ə-lik*).

im-pose (*im-poz'*), *v.t.* *1*, imposed; *2*, to lay in burdens; trouble; *3*, to exact payment or tribute; *as*, to impose taxes; *4*, to force someone to do something *against* *his* *wishes*; *5*, to impose upon; *as*, *to* *impose* *one's* *will* *upon* *another*.—*n.* **im-pose-**

one's *will* *upon* *another*; *6*, *the* *act* *of* *imposing* *one's* *will* *upon* *another*—*adj.* *im-pose-able*.

im-pose-ing (*im-poz'ē-əng*), *adj.* *1*, *imposing*; *2*, *the* *act* *of* *imposing* *one's* *will* *upon* *another*—*adj.* *im-pose-ing*.

im-pos-i-tion (*im-poz'ē-shən*), *n.* *1*, the act of laying in burdens; trouble; *2*, *the* *act* *of* *imposing* *one's* *will* *upon* *another*—*adj.* *im-pose-able*.

im-post (*im-pōst'*), *n.* *1*, a government com-

pany; *2*, *any* *company* *or* *firm* *which* *sells* *goods* *at* *high* *prices* *and* *buys* *them* *at* *low* *prices*—*adj.* *im-pōst'ibl*.

im-post (*im-pōst'*), *n.* *1*, a tax; *2*, imports into a country.

im-postor (*im-pōst'ōr*), *n.* *one* *who* *attempts* *to* *deceive* *others* *by* *adopting* *a* *false* *name* *or* *character* *or* *title*.

im-po-tent (*im-pō-tənt*), *adj.* *lacking* *physical*, *mental*, *or* *moral* *power*; weak.—*n.* **im-po-tence**.

im-pou-ded (*im-pōd'*), *adj.* *1*, to shoot in a pony; *as*, to impound stray dogs; *2*, to seize and hold; *as*, the police impounded his car.

im-pow-er-ibl (*im-pōw'ər-ibl*), *adj.* *1*, to make power; *as*, *his* *grandfather* *imparted* *power*; *2*, to use up the power of; *as*, *to* *use* *up* *the* *strength* *or* *fortitude* *of*; *as*, *to* *exhaust* *powerful* *land*.—*n.* **im-pow'ər-ibl-ment**.

im-prac-ti-ca-ble (*im-prak'tikə-bəl*), *adj.* *that* *cannot* *be* *worked* *or* *used*; *not* *an* *impracticable* *plan*; *not* *impracticable* *device*.

im-prac-ti-cal (*im-prak'tikə-bl*), *adj.* *not* *inclined* *to* *pay* *attention* *to* *what* *is* *useful* *or* *profitable*; *not* *practical*.

im-pre-ca-tion (*im'pe-kā-shən*), *n.* *the* *calling* *down* *of* *evil* *upon* *someone*; *a* *curse*.

im-pre-gna-ble (*im-preg'ñə-bəl*), *adj.* *1*, *not* *to* *be* *impaired* *by* *force*; *not* *comparable*; *as*, *an* *impregnable* *form*; *2*, *not* *to* *be* *overcome* *by* *temptations*; *as*, *a* *man* *of* *impregnable* *temperance*.

im-pre-gna-tion (*im-preg'ñə-shən*), *n.* *the* *act* *or* *practice* *of* *bringing* *members* *into* *a* *country* *from* *abroad*; *also*, *the* *act* *of* *recruiting*.

im-pot-tance (*im-pōt'ēns*), *n.* *1*, importance; *2*, *having* *an* *air* *of* *importance*; *3*, *possessing* *impor-*

tance.—*adj.* **im-pot-tant**.—*n.* **im-pot-tant-ly**.

im-pot-tant (*im-pōt'ēns*), *adj.* *of* *such* *consequence*; *significant*; *re-*

markable; *as*, *an* *important* *election*; *2*, *having* *an* *air* *of* *importance*; *possessing* *impor-*

tance.—*adj.* **im-pot-tant-ly**.

im-pot-tation (*im-pōt'ēshən*), *n.* *the* *act* *or* *practice* *of* *bringing* *members* *into* *a* *country* *from* *abroad*; *also*, *the* *act* *of* *recruiting*.

im-pre-gna-tion (*im-preg'ñə-shən*), *n.* *1*, *impre-*

gnation; *2*, *pregnancy*; *3*, *the* *act* *of* *impregnating* *soil*; *4*, *an* *impre-*

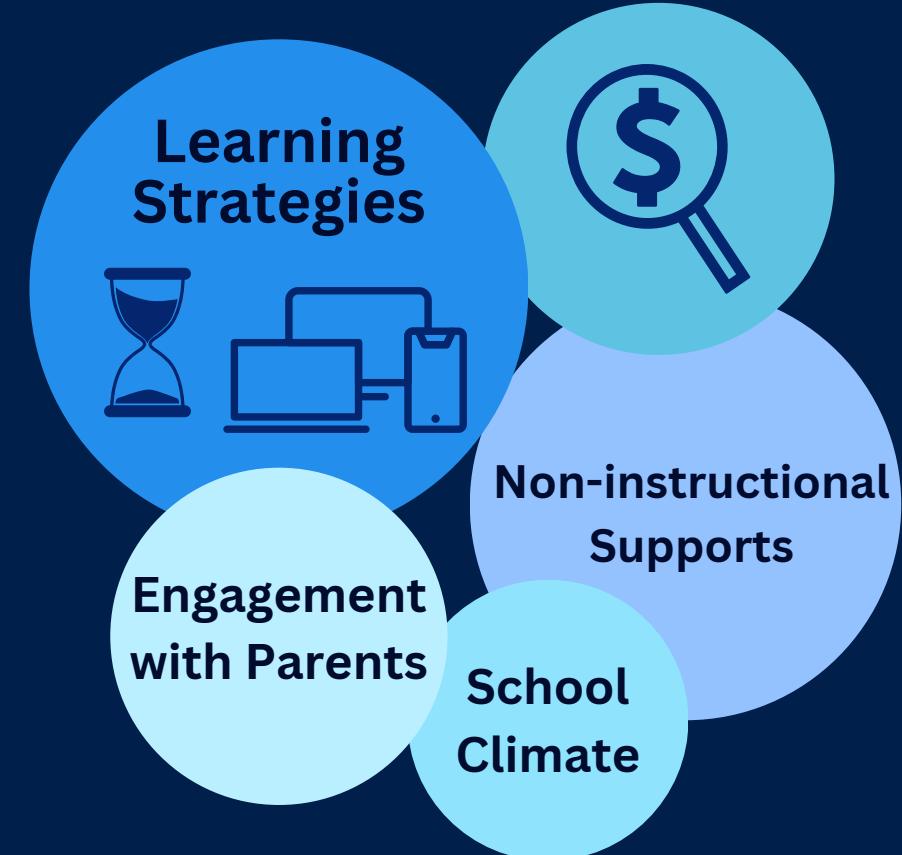
gnation *with* *seedlings*.—*adj.* **im-preg-nat'ibl**.

im-pre-sa-ble (*im-pre-sə-bl*), *n.* *the* *expression*, *intensity*, *or* *conclusion* *of* *an* *opposite* *or* *contrary* *opinion*.

im-press (*im-preß'*), *n.* *1*, *to* *strike* *by* *repetition*; *2*, *impressive*; *impressive*.

im-press (*im-preß'*), *v.t.* *1*, *to* *strike* *by* *re-*

petition; *2*, *impressive*; *impressive*.



What

Why

How

Believe

The word "Believe" is written in large, white, sans-serif letters at the bottom right. Above it, three large grey circles overlap. The top circle contains the word "What" with a green checkmark above it. The middle circle contains the word "Why" with a green checkmark above it. The bottom circle contains the word "How" with a green checkmark above it.

That is still not enough . . .



That is still not enough . . .

The group with the
most points wins!

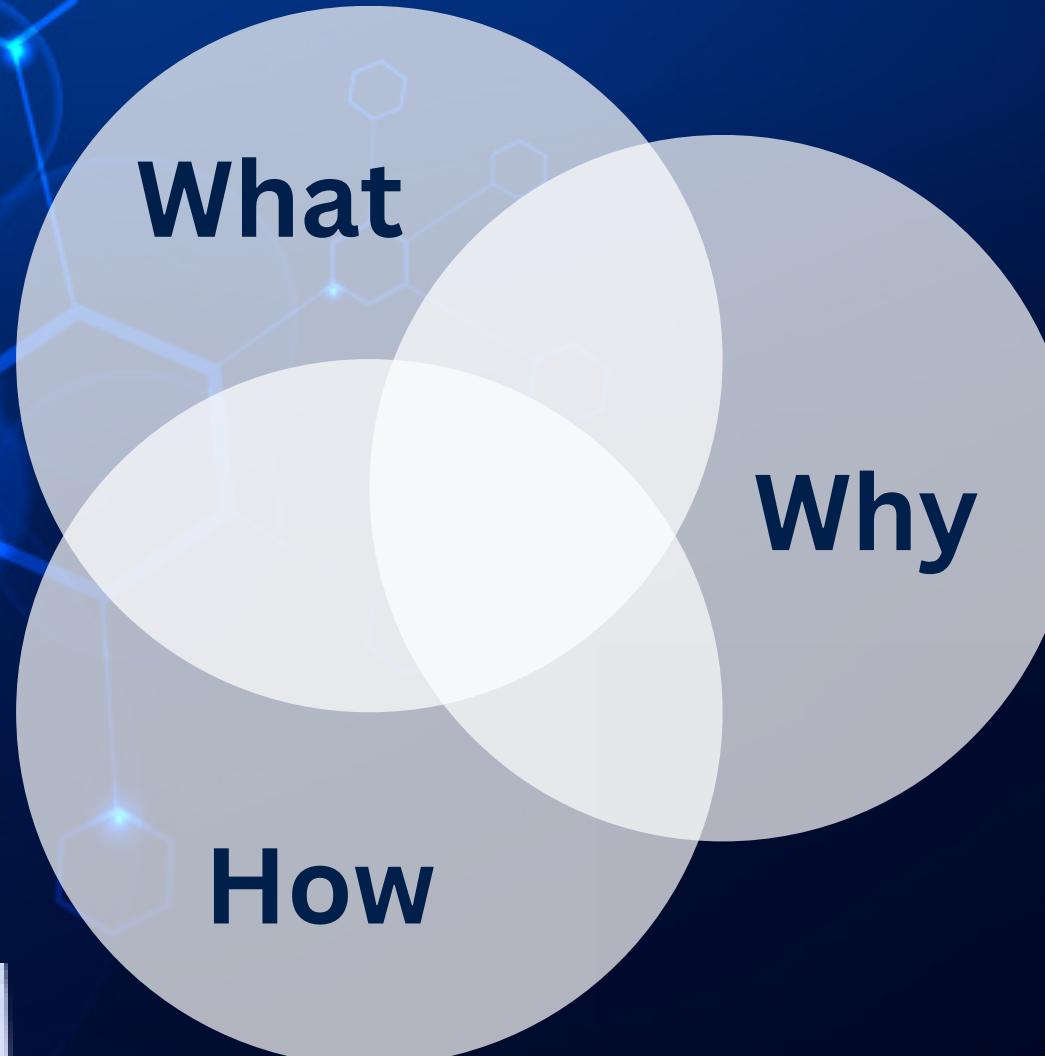




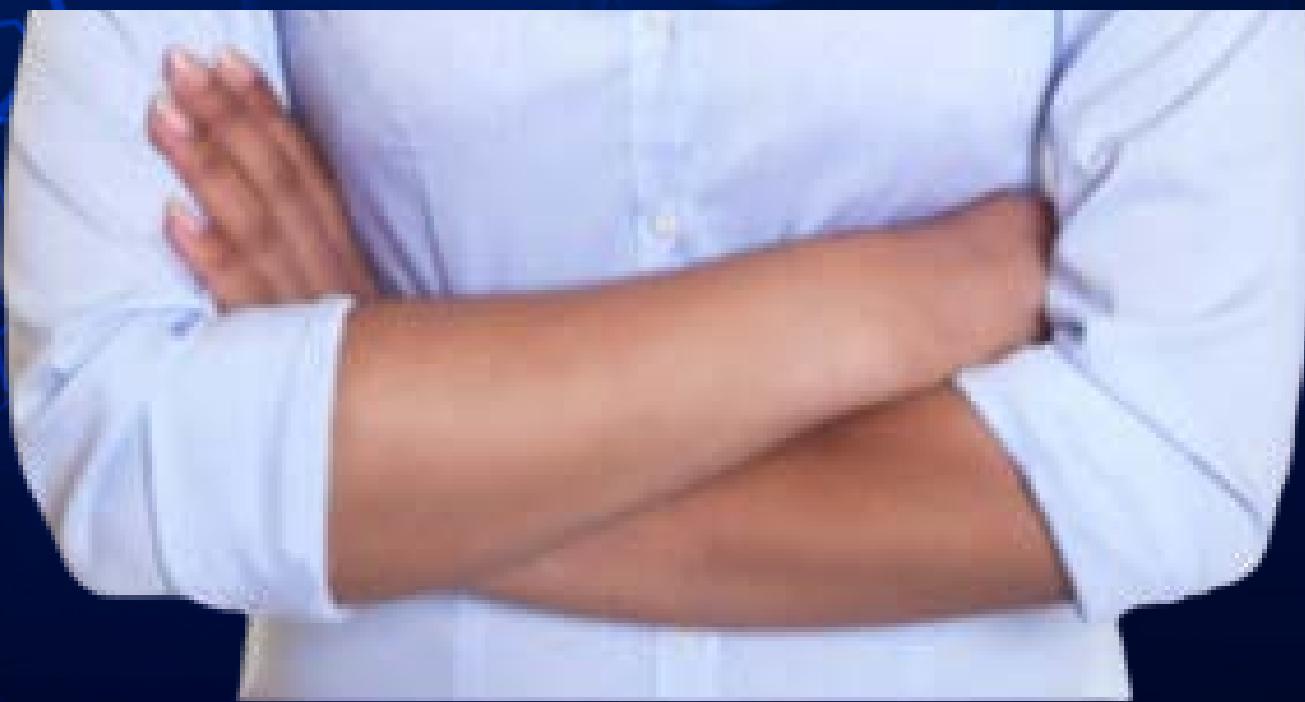
What can we do ?

Collaborate!

What can we do ?



Believe



Collaborate!





THANK YOU!!

direct.me/gbrotto