CONNECTION is FUEL
The science of learning and development paints an optimistic picture about what is possible.
There are 20,000 genes in the human genome — fewer than 10% get expressed.
CONTEXT

Experiences

Environment

Relationships
There is no separation of nature and nurture, biology and environment, or brain and behavior—only a collaboration between them.
3 THINGS TO REMEMBER ABOUT BRAIN DEVELOPMENT

MALLEABILITY

EXPERIENCE-DEPENDENT GROWTH

CONTEXT
PREFRONTAL CORTEX
- Attention
- Concentration
- Focus

HIPPOCAMPUS
- Learning
- Memory

AMYGDALA
- Emotional Regulation
- Reactivity
There is no separation of nature and nurture, biology and environment, or brain and behavior—only a collaboration between them.

The most powerful example of positive context is the human relationship.
TRAUMA IS NOT DESTINY
Relationships are the electrical source for the growth of the brain.
HEBB’S LAW

NEURONS THAT FIRE TOGETHER WIRE TOGETHER
BLOOM’S 2 SIGMA STUDY 1984

* = TEACHER-STUDENT RATIO

TUTORIAL 1-1*

MASTERY LEARNING 1-30*

CONVENTIONAL 1-30*

SUMMATIVE ACHIEVEMENT SCORES

2σ
8th graders below basic proficiency in math:

- All 8th graders: 38%
- White: 26%
- Black: 62%
- Hispanic: 51%
- Asian / Pacific Islander: 16%
- American Indian / Alaskan Native: 55%

Sources: Derived from Education Week graphic based on the National Assessment of Educational Progress (NAEP) 2022 School Survey, Institute of Education Sciences
8TH GRADERS PROFICIENT IN MATH:

2019

34% proficient
We can create learning environments that recognize children as whole people.
Essential Guiding Principles for Equitable Whole-Child Design
designprinciples.org
ZARETTA HAMMOND

turnaroundusa.org/podcast
motivation

belief
purpose
focus
Safety
Health
Mental Health
Social, Emotional, and Cognitive Development
Academic Skills
Identity
Agency
UNLEASH THE POTENTIAL IN EACH AND EVERY YOUNG PERSON

turnaroundusa.org
@DrPamelaCantor #WholeChild
EACH AND EVERY YOUNG PERSON CAN THRIVE