

EXECUTIVE SUMMARY

(Re)Designing for Adolescent Thriving

Using developmental science to reimagine secondary schools and systems in California

California has made an extraordinary bet on secondary education. Across career pathways, community schools, integrated student supports, and related investments, the state has committed billions of dollars to the proposition that high school can work differently than it does. Much of that work is good. Some of it lasts. The difference between the two is rarely funding, and it is almost never effort. It is whether the people carrying an initiative forward can name which parts of it are actually doing the work.

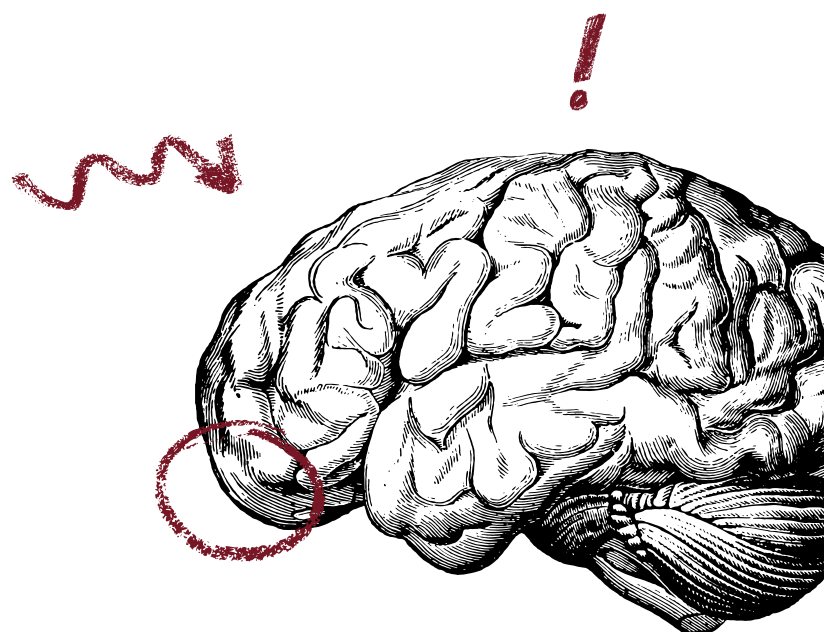
Our challenge: Students and educators alike describe a system of education fundamentally built to produce a narrow set of measurable outputs, like standardized test scores, GPAs, and competitive rankings. That system is leaving our students and teachers disengaged, stressed, and burned out. As one 7th grade student advisor explained, "School feels like getting good grades rather than actual learning."

What developmental science shows:

Adolescence isn't just growth, it's reorganization. The brain is becoming both increasingly specialized and efficient, and this period of plasticity is an opportunity for adolescents to become who they want to be, on a neurobiological level. Emotion and cognition are integrated: what we have

emotions about, we think about, and what we are thinking about, we can learn about. And finally, teens are developmentally primed for significance, not just facts. They are ready to care about *what something means* and *why it matters*, and to connect it to self, others, and the world.

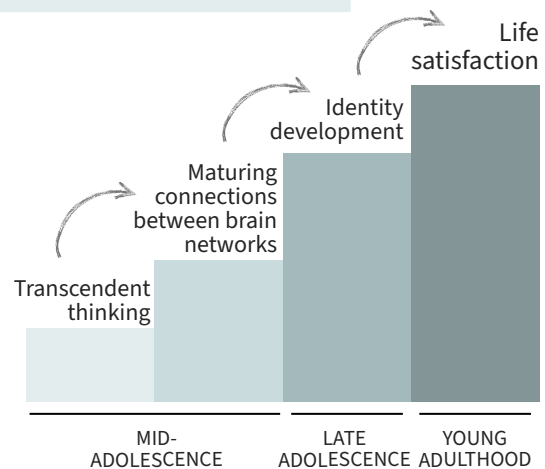
Creating the container: Before deep thinking can happen, students need a learning context that is safe, built on relationships and trust, where they can bring their whole selves and take intellectual risks. Research has shown that the more attuned an educator is to who their students are, socially and emotionally, the more those students demonstrate deeper thinking.



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Centering meaning and purpose: Inside that container, schools can foster *transcendent thinking*: a form of deep, meaning-centered thinking in which students move beyond the immediate task, text, or problem to consider broader patterns, systems, values, and possible futures, and connect those ideas to their own identities, emotions, and sense of purpose. USC CANDLE's longitudinal research found that teens who engaged more frequently in transcendent thinking showed greater brain growth, which predicted stronger identity development by around age 19, which in turn predicted higher life satisfaction as young adults.

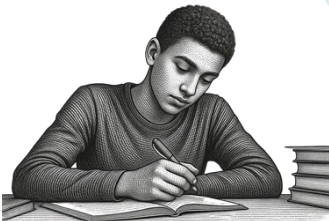
Transcendent Thinking and Well-Being: A Developmental Cascade



Source: Gotlieb, Yang & Immordino-Yang, 2024.
Figure created for this report.

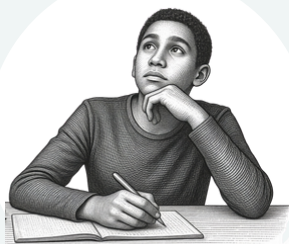
What is Transcendent Thinking?

"I know what is going on and what to do."



Learning in the "Here and Now"

"What does this mean about the world? About me?"



Transcendent Thinking, "Above and Beyond"

These outcomes held true regardless of a student's IQ or socioeconomic status. Transcendent thinking is not an add-on for students who have already proven themselves. Meaning is not the reward for fluency; it is often what makes fluency worth acquiring.

Redesigning classrooms: Six actions turn this science into everyday practice. To create the container: (1) Build developmental relationships through socially-oriented structures and daily practices, (2) Co-create a physically, emotionally, and identity-safe environment, and (3) Design for co-regulation, not just calm. To center meaning and purpose: (4) Anchor in big ideas, compelling questions, and multiple perspectives, (5) Embed meaningful choice and voice, and (6) Integrate constructive reflection prompts.

Check out the practices in action in [math](#), [science](#), and [English language arts](#).

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Making it last: Leaders across California's secondary redesign efforts, together with teachers, pointed to five obstacles that compound one another: the reasoning does not travel with the model; new language creates distance from practice that is already strong; understanding is not the same as a delivery structure; when the reasoning lives in people, it leaves when they do; and the conditions of the job squeeze out the practice. In response, district and initiative leaders should name the active ingredients, in writing; introduce the science as an account of existing work, not a replacement for it; fund the structure that delivers, not only the materials; build the reasoning into structures, not individuals; and subtract before you add.

Calls to Action

None of this asks schools to add another program to an already crowded plate. It asks something more fundamental: that we design the school day, the classroom, and the systems around it based on what adolescents actually need to grow, rather than retrofitting new priorities onto a structure built for a different era and a different purpose.

It asks each level of the system to do something with what it already has. Start where you are: educators can find one place to build a sustained connection with students and one task to open up to students' own thinking, values, and experience. Make room: school, district, and county leaders can protect time for relationships and collaboration, keep teaching loads manageable, and make sure observation,

evaluation, and curriculum adoption reward developmentally attuned teaching instead of pacing and compliance. Make it durable: initiative leaders can name what is developmentally load-bearing in their existing work and write it down for whoever comes next, and policymakers can fund the conditions for real relationships and add indicators of relational safety, meaning, and purpose to what accountability systems measure.



Our education system was not built around what we now know about adolescent development, but the science is unambiguous. It calls for us to shift the way we have designed the school experience for young people.

What we hope for is not simply higher test scores, though we expect those to follow. We hope for young people who know who they are, what they value, and how they want to show up in their relationships, their communities, and their futures.