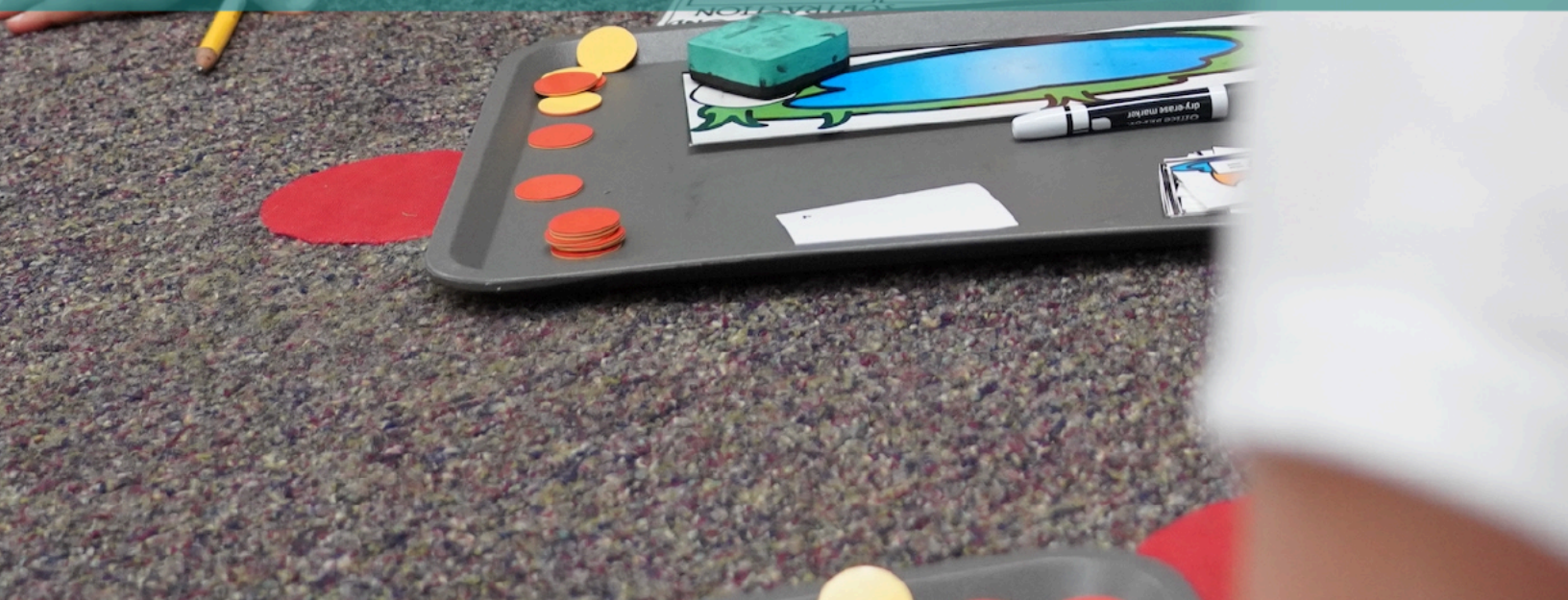


Transcend

IGNITING *Agency*

in K-8 Learning Environments

V4.0



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Help Us Continue to Improve This Resource

One of our core values at Transcend is Perpetual Beta—we are always looking to learn, grow, and improve. If you have comments or suggestions for our next iteration, please contact resources@transcendeducation.org.



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This resource was designed for the K-8 audience. If you are looking for a specific focus on TK-2, look at our TK-2 primer found here.

See the supplemental resource designed to support usable knowledge integration into practice. The TK-2 deck and K-8 deck of cards and guidance are designed to increase regular reflection on agency practices.



EXECUTIVE SUMMARY

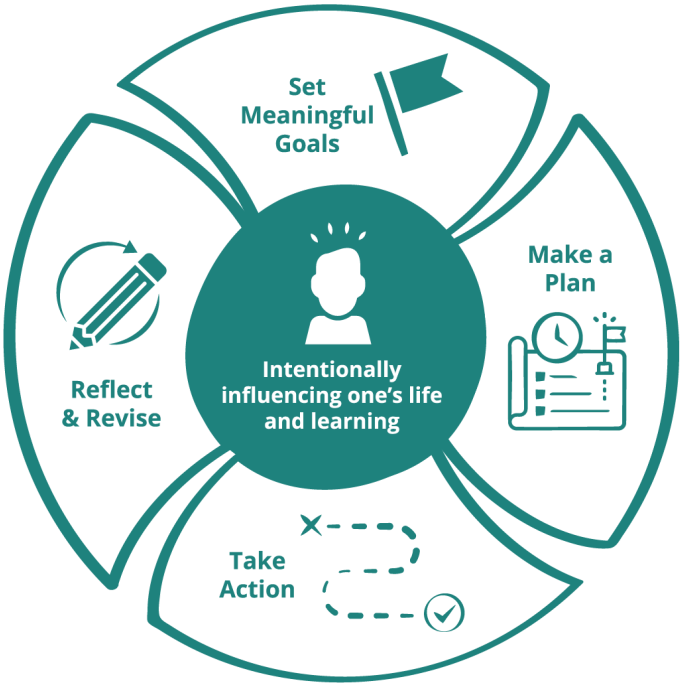
Agency is a key ingredient for both personal thriving and collective good. Yet the very DNA of schooling in the United States often prevents learners from practicing agency.[1] Instead, it reflects a culture of compliance and positions many children as passive vessels to be filled and requires them to "earn" what others enjoy freely.[1] *Igniting Agency in K-8 Learning Environments* will help you and your community understand what agency is, why it's critical to ignite agency across a young person's schooling, what enables it, and how to design learning environments that are supportive of it. Building on our earlier primer focused on K-2 learners, this expanded edition traces how agency and what it takes to nurture it grows and evolves from the early grades through early adolescence.

What Is Agency?

Agency is the ability to intentionally influence one's life and learning. It entails a continuous and dynamic process of setting goals, making plans to achieve those goals, taking action, and reflecting and revising along the way.

Set Meaningful Goals

Goals set an intention for an individual or group. They can be big, collective, long-term desires (e.g., "we want to plant a garden") or small, individual, daily, or even momentary ones (e.g., "I want to put my jacket on by myself").



Make a Plan

With these goals in mind, individuals then plan how they will reach their goals by establishing specific strategies and steps.

Take Action

Next, they jump into action, making choices, exercising their voice, taking ownership, and following through on their plan to get there.

Reflect & Revise

Along the way they will self-reflect and correct their course as challenges and new understandings arise.

Why Prioritize Agency?

Agency is an essential ingredient for thriving in and transforming the world. However, it often isn't a centerpiece of young people's experiences in school. Here are some things we know and believe about why agency deserves deliberate focus throughout a young person's education.

- Agency must be a part of *every* learner's school experience—no matter where they live, who they are, or what conditions they face.
- It's never too early to start. Young children are just as capable and ready to begin building the skills that make up agency as older students are.
- Agentic classrooms let young people act on their curiosities. That opportunity often shrinks dramatically when children enter formal schooling and continues to erode over time, as learners' readiness expands while learning environments remain rigid.
- Agency fuels lifelong learning and achievement and is vital for navigating the challenges of a complex, uncertain future.
- Agency isn't only something individuals exercise alone. When young people come together around a shared goal, exercising what's called collective agency, they can take on the toughest challenges facing their communities.

The case for prioritizing agency is strong at every age, but it looks different for a kindergartner just forming a sense of herself as a learner, a fourth grader ready to take on more responsibility, and an eighth grader beginning to act on what they care about.

How Does Development Impact Agency?

Building agency in developmentally-attuned ways starts with understanding young people themselves: how they think, feel, relate, and grow at each stage of their journey through school.

Note: Development is fluid; the content in the bands below are evidence-based generalizations, and every young person moves through them in their own way and time.

In grades K-2, young learners are curious, driven to master new skills, and eager to act on the world around them. They can already move through a simple version of the full agency cycle: setting small goals, trying a plan, and adjusting when it doesn't work. What they need most is for that cycle to stay concrete, playful, and supported by warm relationships with trusted adults.

In grades 3-5, learners' growing self-awareness transforms the agency cycle. They become genuinely able to reflect on their own thinking, judge their progress, and persist toward goals—though planning works best when goals stay concrete and time horizons short. Peer

relationships deepen, and belief in their own capability increasingly shapes whether they choose to take on a goal at all.

In grades 6-8, abstract thinking makes long-term goals and plans possible for the first time, and emerging identity and purpose start to shape which goals feel worth pursuing. This is also when motivation for academic learning declines most steeply, even as young people's need for autonomy, connection, and respect grows, making it a critical window for creating agentic environments.

What Drives Agency?

People are more likely to exhibit agency when they are **motivated,** have the required **capacity,** and are situated in a **supportive context.** The relationship among these three factors—or drivers—is dynamic, and when these factors are present, they enable individuals to intentionally influence their lives and learning.

Motivation

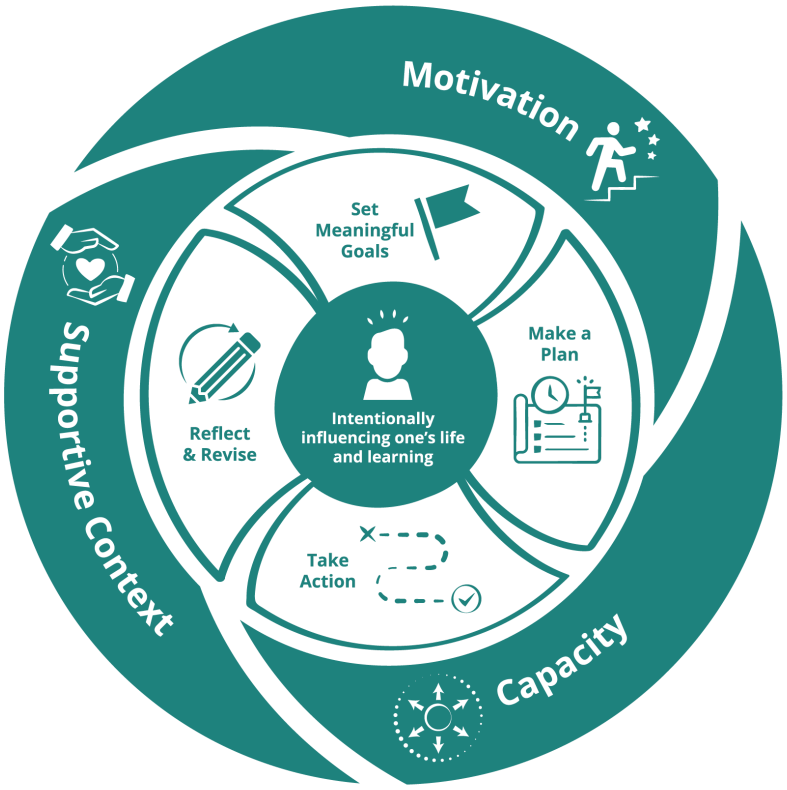
Enacting one's agency is hard work and requires the motivation to take risks, invest effort, and persist.

Capacity

A wide array of knowledge, skills, and mindsets support agency. They enable an individual to successfully take on the process of setting goals, planning, taking action, and reflecting.

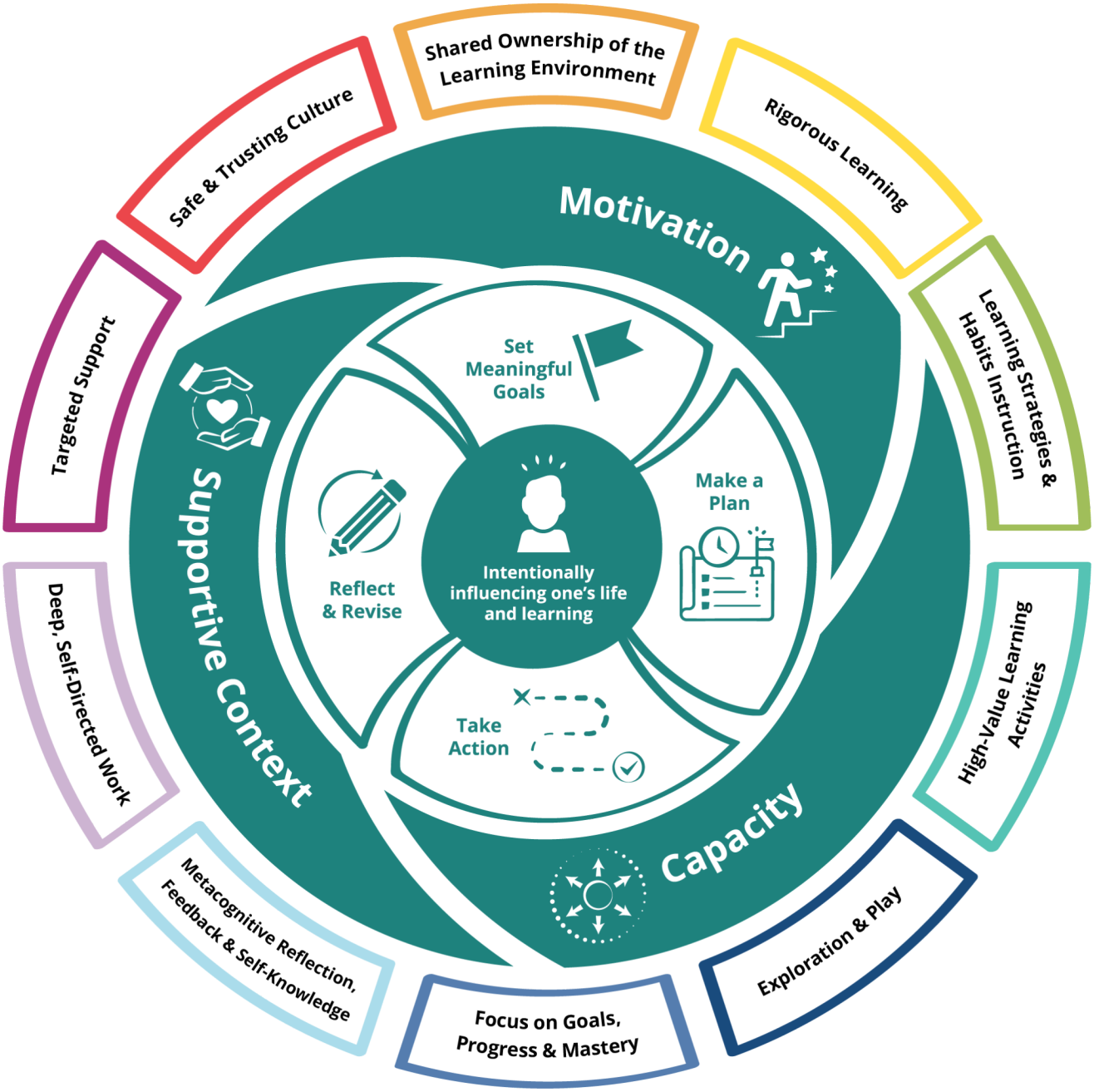
Supportive Context

A context that is supportive of agency also provides individuals with the relationships, opportunities, and resources needed to safely take risks, feel seen, overcome challenges, tackle meaningful goals, and drive their learning.



Agency-Promoting School Practices

There are a variety of ways to cultivate agency. We have identified ten agency-promoting school practices that align with the research on agency and development and with what forward-thinking schools are doing to support agency development in their learners.



Safe & Trusting Culture	A safe and trusting culture creates the context in which learners feel seen, known, and valued as whole people—and where their voices, wonderings, and needs are respected and nourished proactively.
Shared Ownership of the Learning Environment	Structures that encourage and embolden learners to navigate, care for, and shape their learning environment help create the conditions for agency to flourish.
Rigorous Learning	Through challenging content, evidence-based instruction, and learners doing the majority of the thinking, young people master academic knowledge and skills that support agency.
Learning Strategies & Habits Instruction	Instruction on learning strategies and habits helps learners practice and master new skills that support them to drive their learning.
High-Value Learning Activities	High-value learning activities seamlessly integrate learners' interests and curiosities with standards-aligned content and skills in developmentally appropriate ways.
Exploration & Play	Exploration and play are contexts where learners can enact their agency by actively defining and pursuing their interests and goals in joyful, meaningful, and engaging ways.
Focus on Goals, Progress & Mastery	A focus on goals, progress, and mastery makes young people's learning and the process that got them there visible.
Metacognitive Reflection, Feedback & Self-Knowledge	Metacognitive reflection, high-quality feedback, and growing self-knowledge help learners engage in the self-evaluation needed to reach their goals and understand who they are now and in the future.
Deep, Self-Directed Work	When engaging in deep, self-directed work, learners build perseverance and do the "heavy lifting" for their own learning.
Targeted Support	Targeted support provides avenues through which learners can identify their need for help, self-advocate, and receive additional support.

INTRODUCTION

Agency, or the ability to intentionally influence one's life and learning, is a key ingredient for both personal thriving and collective good. It is the centerpiece of the OECD's Learning for 2030 framework[2] and the UN's Convention on the Rights of the Child.

Yet the very DNA of schooling in the United States often prevents learners from practicing agency, positioning them as vessels to be filled instead of active participants with perspectives to contribute.[1] The consequences are measurable: students report few opportunities to take charge of their learning, and the longer they spend in school, the less they like it—a decline driven in part by learning environments that offer less autonomy and connection exactly as young people become ready for more.[3,4,5] Instead of opportunities to enact agency being the baseline, they are typically viewed as something that must be earned gradually over the course of a learner's education, and even then they are often made available only to a small, privileged group of learners.[1] This both stifles learners now and hinders them from becoming powerful agents of change in the future—a future being rapidly remade by artificial intelligence, where young people will need to chart their own paths through constant change and work together on novel problems.

But what is the alternative? How might we rethink and redesign learning so that all learners*, including our very youngest and those furthest from opportunity*, are able to enact their agency and recognize their power?

Igniting Agency in K-8 Learning Environments will help you and your community answer that question. Building on our earlier primer focused on K-2 learners, this expanded edition focuses on learners across grades K-8, tracing how agency and what it takes to nurture it grows and evolves from the early grades through early adolescence. We zoom in on three grade bands: K-2, 3-5, and 6-8. The primer is divided into five sections:

- **Section 1: What Is Agency?** This section lays out a detailed definition of agency and the actions involved.
- **Section 2: Why Prioritize Agency?** The next section focuses on five big reasons agency is an important aspect of K–8 learning.
- **Section 3: How Does Development Impact Agency?** This section paints a picture of young people's development in K-8 (via grade bands K-2, 3-5, and 6-8) and what it means for how agency grows and evolves over time.
- **Section 4: What Drives Agency?** This section explores the science of agency, specifically how three factors drive or enable agency, with a focus on K–8 learners.

Section 5: How to Support Agency in Practice The last section offers ten agentic practices, attuned to each of the three grade bands, that can act as inspiration when redesigning learning to advance agency.

Empirical research on agency and child and adolescent development is expansive. This resource is not meant to be a comprehensive review of the literature; rather, we seek to summarize key insights regarding cultivating agency through K-8 in ways that are accessible and actionable

WHAT IS AGENCY?

We define agency as *intentionally influencing one's life and learning* and view agency as a multistep process that involves establishing goals, planning, taking action, and reflecting and revising one's plans along the way. Agency may be enacted alone to achieve personal goals or with others to achieve collective goals.

We arrived at our simplified, teacher- and learner-friendly definition of agency through a review of definitions used in relevant research and the common themes that emerged across them, as well as extensive community input.

While there is no universally agreed-upon definition of agency,[2,6] experts focused on the topic have set forward definitions such as:

- "Being able to influence what and how something is learned in order to expand capabilities".[6]
- "To influence intentionally one's functioning and life circumstances".[7]
- "The ability to make intentional choices about and take an active role in the course of one's own learning".[8]
- "A person's capacity to leverage resources to navigate obstacles and create positive change in their learning and life".[9]
- "The capacity to set a goal, reflect and act responsibly to effect change".[2]

Enacting Agency Collaboratively
Agency can also be a collaborative process used to advance shared goals and responsibilities. Researchers describe two related forms of this:

- **Co-agency:** "Interactive, mutually supportive relationships—with parents, teachers, the community, and with each other—that help students progress towards their shared goals".[2]
- **Collective agency:** "Individual agents acting together for a community, a movement or a global society".[2]

- "The ability to set meaningful goals and have the will and skill to achieve them".[10]

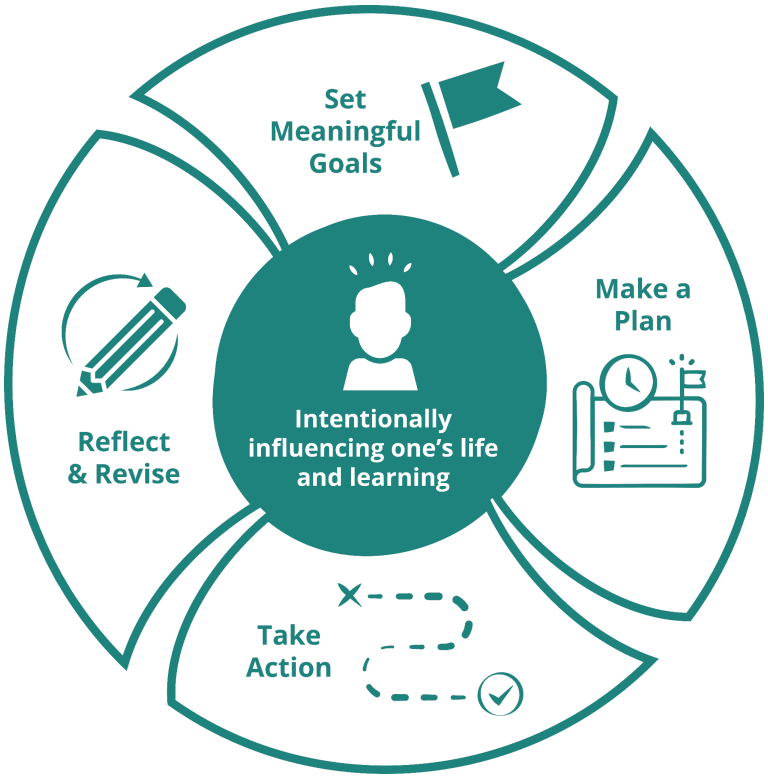
Across these definitions and the wider research, a number of themes are apparent. These themes suggest that agency involves

- responding to one's context and the opportunities and obstacles it presents;
- acting in alignment with one's understanding of oneself and one's purpose;
- shaping one's development, environment, future outcomes, and life circumstances;
- using a wide range of capacities to identify goals, steps, resources, and processes to get there; and
- working alone and/or with others to advance goals.

The Agency Cycle

Enacting agency is a process. This process involves setting meaningful goals, making plans to achieve those goals, taking action, and reflecting on progress in order to maintain, or correct course. In this resource, we call this process *The Agency Cycle.* Each stage of this cycle is depicted in the visual below and briefly explained in the paragraphs that follow.

Sources: (Poon, 2018a). The components of learner agency used in this graphic draw heavily from those outlined in Jenny Poon's article, Part 1: What Do You Mean When You Say "Student Agency"?.



Set Meaningful Goals

Goals should be advantageous and worthwhile to the individual or group pursuing them.[11] They can be big or small, individual or collective, long-term or immediate, and they grow with the learner. For a kindergartner, a small, individual, and immediate goal could be: "I want to put my jacket on by myself." For a middle schooler, a big, collective, long-term goal could be: "We want to plan, plant, and sustain a community garden on school grounds."

Make a Plan

With these goals in mind, individuals then plan how they will reach their goals. Here, one might break bigger goals into smaller goals, plan out the steps they need to take, assign a task to a specific block of time, create a timeline, and/or identify the support they might need to achieve their goals. Additionally, when making a plan of action, individuals may, informally or formally, define metrics of success: *what would it look like for me to reach my goal?* Like goals themselves, plans become more sophisticated as learners grow—from a step or two completed with an adult's help, to timelines, milestones, and a sense of what to do if the first approach doesn't work.

Take Action

Next, individuals act toward their goals, making choices, exercising their voice, taking ownership, and following through on their plan to get there. Part of this process requires that they try out different strategies to accomplish goals, be open to real-time feedback and consequences, explore topics of interest, and even diverge from their peers.[11]

Reflect & Revise

Agentic individuals also self-reflect and correct their course. As challenges and new understandings arise, individuals know how to use their reflections and feedback from others to persevere, make adjustments, and continue building their agentic capacity. Reflection and revision requires that individuals answer questions such as:

- Did I meet my goal?
- What have I tried so far?
- What might I try next time?
- What resources or support might help me?

It is important to note that these stages are not rigid. Instead, the process of enacting one's agency is dynamic and can happen out of sequence. In addition, the stages may happen in quick succession and become more informal and intuitive, especially as someone gains more experience enacting their agency in different situations. In fact, this cycle is visible from the very beginning of life. Even before starting school, children act out their agency through what we commonly recognize as play. During play, children start with an idea in mind, experiment, and try again as they learn through the immediate consequences of their actions. When trying to build a fort, stacking blocks unevenly leads to a collapse, which leads the child to align them more evenly to achieve a successful fort. The same cycle only grows in reach and sophistication across the years that follow—from block forts to launching a podcast or organizing a fundraiser.

Later on in this resource, we discuss three drivers of agency: **motivation**, **capacity**, and **supportive context**. In that section, we discuss why each driver matters for agency, how it works, as well as related developmental insights for each grade band.

Agency, Culture, and Context

Agency can look different across contexts. Research shows that understandings and expressions of agency vary widely across cultures and settings.[1,2,6,12] For example, in some cultures, such as Japan, decision-making is often rooted in consensus rather than individual action.[13] In the United States, it is important to recognize that ideas about agency are shaped by historical and cultural influences.14 Developing an expansive understanding of learner agency—one that values varied ways of expressing agency—is important.

Agency isn't solely individualistic. The idea that agency is shared, influenced, and co-regulated among learners, peers, teachers, parents, and communities is sometimes referred to as co-agency.[15,16] "Co-agency is when educators and learners become co-creators in the teaching and learning process. The concept of co-agency [recognizes] that students, teachers, parents, and communities work together to help students progress towards their shared goals".[2] Co-agency stands in contrast to the idea that agency is solely about independence and free choice; co-agency is also about interdependence and joint influence. It is the lens that schools and educators should use when designing agentic learning environments.[2,13]

Society does not give everyone the same space to enact their agency or the same support to help. For some, exercising agency can carry real risks because of how others perceive them or because access to resources and support vary widely, making it more burdensome and high stakes. These dynamics can also intensify as learners grow older: in adolescence, speaking up in class carries real social weight among peers, and some young people may find their self-advocacy read as defiance rather than agency, especially in schools with harsh discipline policies.[17,18] Parents have expressed concerns about this. For instance, in focus group interviews, Latinx and immigrant parents in Texas voiced their concern with agentic learning experiences present in their children's classroom. Their concern wasn't about their children's readiness, but about potential negative consequences or making it "difficult for their vulnerable children to get what they need at school".[1] These fears deserve attention. School systems and educators should take time to understand the dynamics that may be running counter to agentic learning, and work to address them.[19]

WHY PRIORITIZE AGENCY?

Agency is an essential ingredient for thriving in and transforming the world. However, it often isn't a centerpiece of young people's experiences in school. Here are some things we know and believe about why agency deserves deliberate focus throughout a young person's education.

- Agency must be a part of every learner's school experience—no matter where they live, who they are, or what conditions they face.
- It's never too early to start. Children are just as capable and ready to begin building the skills that make up agency as older students are.
- Agentic classrooms let young people act on their curiosities. That opportunity often shrinks dramatically when children enter formal schooling and continues to erode over time, as learners' readiness expands while learning environments remain rigid.
- Agency fuels lifelong learning and achievement and is vital for navigating the challenges of a complex, uncertain future.
- Agency isn't only something individuals exercise alone. When young people come together around a shared goal, exercising what's called collective agency, they can take on the toughest challenges facing their communities.

The case for prioritizing agency is strong at every age, but it looks different for a kindergartner just forming a sense of herself as a learner, a fourth grader ready to take on more responsibility, and an eighth grader beginning to act on what they care about.



Agency must be a part of *every* learner's school experience, no matter where they live, who they are, or what conditions they face.

Our educational system does not provide every student with the same opportunities to exercise their agency in school.[1] For example, current research highlights how early in their schooling learners of color are taught to comply, while white children from privileged backgrounds are taught to take risks, demonstrate leadership, share their ideas, and discover and enact their agency.[1] This difference in opportunities reflects the varied expectations our society holds for children based on their backgrounds, life experiences, and economic status.

Denying *any* child the opportunity to enact their agency based on who they are or requiring that they "earn" what others enjoy freely at school is unfair and perpetuates disparities.[1] In order to build a more just and fair *future,* we must focus on making agentic learning the norm for all learners *today*.



Agency involves a variety of skills; young children are capable and ready to start building these skills and enacting their agency.

> Young learners do not need to master specific academic knowledge and skills, such as literacy skills, before practicing agentic learning and decision making.

Children build important skills and deepen their learning through opportunities to enact their agency in early elementary contexts.[1,6,20,21,22] Adair (2014) argues that agency in early grade contexts "helps children take advantage of the unique developmental stage they are in and expands their capabilities beyond simplistic understandings of content and basic learning skills" (p. 238). Indeed, in observations of agentic learning environments, researchers observed young children building their ability to clarify information, collaborate, lead, fail without giving up, and much more.[1] Beyond specific skills, these early experiences shape how children come to see themselves: when they set out to do something, work at it, and succeed, they begin to believe they are capable of making things happen—a belief about themselves as learners that influences whether they take on challenges down the road. In these contexts, content knowledge and learners' curiosity act as a vehicle for them to build upon and reinforce these types of skills.[1,6]

Literature also suggests that young learners do not need to master specific academic knowledge and skills, such as literacy skills, before practicing agentic learning and decision making.[1,20,23] For example, research indicates that learners as young as five are, with teacher support, able to set goals.[24] In fact, cultivating self-determination early gives young learners more time to develop their choice-making, goal-setting, decision-making, and problem-solving capacities—essential skills needed for self-determination in later stages of life.[24]

So, while young learners will need support from teachers, parents, and peers to set goals, make decisions, and enact their agency, they *are* ready. As Stixrud and Johnson (2018) put it:

> It doesn't make sense to wait until your children's brains have fully matured before entrusting them with decisions, or you would be waiting until their late twenties or early thirties. The brain develops according to how it's used. This means that by encouraging our kids…to make their own decisions, we are giving them invaluable

experience in assessing their own needs honestly, paying attention to their feelings and motivations, weighing pros and cons, and trying to make the best possible decision for themselves (p. 59).



Agentic classrooms enable young people to act on their curiosities. That opportunity often shrinks dramatically when children enter formal schooling—and continues to erode over time, as learners' readiness expands while learning environments remain rigid.

Children are naturally curious. Prior to school, children spend much of their time asking questions and engaging in play, which is a key context for agency at that age. However, when children enter formal schooling, this changes. Almost overnight, opportunities to play and make their own choices decrease,[25] questioning and curiosity typically decline,[26,27] and children may retreat, behaving less independently than before.[25] This loss matters because decades of research show that when people feel in control of their behaviors, decisions, and goals, they are more motivated.[28,29,30] A school culture built on compliance takes that feeling away, right as children are forming their first understanding of what school, and being a learner, is all about.

The decline doesn't stop there. A recent meta-analysis of longitudinal studies confirms that student engagement falls across adolescence, with the drop steepest when students transition schools.[31] Intrinsic motivation for learning follows the same arc, declining most sharply around ages 13-14.[32] Students themselves echo those results: in surveys of more than 70,000 young people, most reported few opportunities to take charge of their learning—and the longer they'd been in school, the less they liked it.[3]

Curiosity, in particular, may be a critical and underemphasized factor in learning: research has found a statistically significant relationship between curiosity and academic achievement—strongest for children in under-resourced homes.[33] In other words, the learners with the most to gain from curiosity-driven learning are often those in environments most likely to suppress it. All of this suggests that schools must focus on nourishing, not extinguishing, learners' curiosity and motivation; agentic learning is a step in this direction.



Agency fuels lifelong learning and achievement and is vital for navigating the challenges of a complex, uncertain future.

Opportunities for children to use their agency in early grades can build their capacity for achievement.[24] People who are able to enact their agency are equipped to gain mastery over challenging academic content, overcome roadblocks, redesign their environments to achieve desired goals, and persist while learning.[7,34,35]

> Agency doesn't just support learning now—it prepares young people for a lifetime. Today's children are likely to live longer and work in a faster-changing world than any generation before them, and the capacities that will carry them all depend on their ability to direct their own learning and lives.

Agency will not only support learning now but for a lifetime, and this is vital for navigating a complex, uncertain future. Demographers expect today's five-year-olds to live one hundred years. As people live longer, individual capacities practiced early, such as self-efficacy and curiosity, "become the emotional toolkit for longevity," better preparing them to navigate the challenges of adulthood, from career changes to financial hardship to illness.[36] Meanwhile, today's learners are entering one of the most unpredictable, fast-moving labor markets in modern history: AI is reshaping tasks across industries, entry-level roles in AI-exposed fields are already declining, and the "half-life" of a skill is now estimated at just two to three years. In this world, the capacities that endure—learning continuously, adapting to new tools and contexts, and exercising judgment in ambiguity—all depend on young people's ability to direct their own learning and lives. And yet navigating one's path is only part of the task. These young people will also inherit shared challenges like poverty, food insecurity, climate change, and political division—alongside whatever new ones emerge from a world AI is still in the process of reshaping. Facing them will require collective agency, or the ability for individuals to come together for a shared purpose, movement, or society.[2,13]



Agency isn't only something individuals exercise alone. When young people come together around a shared goal, exercising what's called collective agency, they can take on the toughest challenges facing their communities.

Acting together isn't an advanced skill young people grow into only later—it shows up from the very start of school. Research in first-grade classrooms has documented young children using their agency communally: one child's question or idea becomes a shared endeavor, with classmates joining in, contributing, and building on each other's thinking.[20] In many cultures and

communities, this is the primary way agency is understood and practiced, as something exercised with and for others, not just for oneself.[2,20]

Development then steadily expands what working together can mean. Across grades 3-5, learning becomes more deeply social: friendships grow into relationships of real trust and mutual support, and peers become genuine collaborators rather than just companions.[38,29] By early adolescence, young people are developmentally primed for collective action. They are motivated by their peers more than ever, begin developing a sense of purpose that extends beyond themselves,[40] and grow a critical awareness of injustice paired with a belief that they can do something about it.[41] It's no accident that adolescents have been at the forefront of social movements for generations.[42] Their flexible problem-solving, concern for others, and openness to new ideas make this a particularly opportune time for agency and leadership.[43]

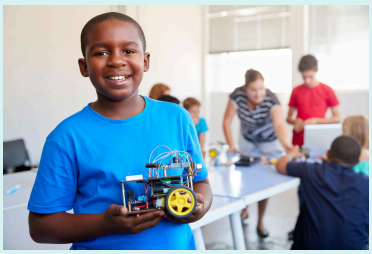
Why Agency Matters at Each Stage

The reasons to prioritize agency are strong at every age, but they take on a particular urgency at each stage.



Grades K-2

Children are forming their first beliefs about whether they're capable, and early agentic experiences create a positive learner identity.



Grades 3-5

The skills required for agency are developing quickly and learners are eager to use them, making these years a window to build agentic habits while the drive is strong.



Grades 6-8

Motivation for schoolwork dips more steeply than at any other stage, just as young adolescents grow ready to take on real, consequential work. Agency can buffer against that dip.

HOW DOES DEVELOPMENT IMPACT AGENCY?

Building agency in developmentally-attuned ways starts with deeply understanding young people: how they think, feel, relate, and grow at each stage of their journey through school. What agency requires of young people and of the adults and environments around them evolves over time. A kindergartner and a middle schooler are both capable of enacting agency, but the skills involved, the relationships that support them, and the kind of independence that's developmentally appropriate look different at five than they do at thirteen. For each grade band below, we first paint a picture of who learners are at that stage, then look at what each part of the agency cycle—setting meaningful goals, making a plan, taking action, and reflecting and revising—looks like for them.

Note: Development is fluid; the content in the bands below are evidence-based generalizations, and every young person moves through them in their own way and time. The full research base behind these summaries appears in Appendix.

Grades K-2







In grades K-2, children think symbolically and through play rather than through logic,[46,49] and they're driven by curiosity and a genuine desire to master new skills.[46] They lean heavily on trusted adults for both practical help and cues about what's safe, interesting, or worth trying, even as they begin solving problems more independently.[49] Children's sense of identity and pride in who they are is just beginning to take shape.[50] Even at this age, agency is often exercised together, as one child's question can become a shared endeavor the whole class builds on.[20]

The Agency Cycle in Grades K-2

Set Meaningful Goals. Children can set real goals: small, concrete, and immediate ones (*"I want to put my jacket on by myself"; "I want to build a taller tower*"). Through play, a goal is often simply an idea to try.[46] Time horizons are short: a goal that lasts longer than a day is hard for young children to hold onto, so they need an adult to help them stay with it.

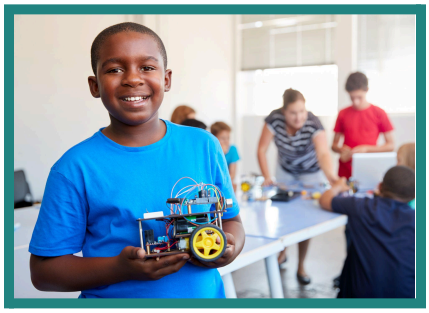
Make a Plan. Children can make simple plans, as they are able to think a step or two ahead, especially inside familiar routines.[49] Holding a multi-step plan in mind is still hard, so a plan works best when it's written or drawn and worked through together with an adult.

Take Action. Take Action. Children act with growing independence, attempting problems on their own before seeking help from a peer or adult.[49] They experiment, invent, learn from the immediate consequences of their actions, and accept better ideas when they come across them.[49] They also naturally take action with others, building on one another's thoughts and ideas.[20]

Reflect & Revise. Reflection is present in its earliest form: children are beginning to think about their own learning as they come to understand what being a "learner" means.[51] At this age, reflection lives in the moment, as children aren't yet able to look back across days or reflect on their own without an adult thinking alongside them.

Grades 3-5







In grades 3-5, young learners' worlds steadily become more social. Peer friendships deepen from shared activities into real trust and mutual support,[38,39] and peers begin to matter more—though teacher relationships remain essential.[52,53] Their sense of self grows more realistic. They increasingly measure themselves against their peers and their belief in their own capability starts to shape which challenges they'll attempt.[45,48] Racial and ethnic identity grows more salient to how they see themselves.[54,55] Intrinsic motivation begins a slow decline in this band (a decline that will accelerate sharply in middle school),[56,57] making these years a critical window for building enduring agentic habits.

The Agency Cycle in Grades 3-5

Set Meaningful Goals. Young learners can set and hold real goals, and motivation to pursue them is increasingly subject-specific. A learner may be deeply goal-driven in one subject and indifferent in another.[58] Their sense of time is still maturing, such as locating a deadline, gauging how long things take, and adapting plans to available time.[59,60] This means that the goals they are capable of owning remain concrete and near-term, stretching gradually across the band.

Make a Plan. Young learners can begin breaking a goal into steps and choosing strategies to reach it, supported by growing working memory and more deliberate use of learning strategies.[61,62] However, because these skills are still new, an unfamiliar strategy can take a lot of effort at first and can even slow a learner down before it starts to help.[63] Holding a multi-step plan in mind is still difficult without support.

Take Action. Follow-through strengthens as delay of gratification and goal persistence mature.[64] Deeper friendships make collaboration toward shared goals possible for the first time.[38] As learners begin to see rules as negotiable rather than fixed,[65] they become more comfortable exercising their voice.

Reflect & Revise. Metacognition truly comes online during this time. Young learners become able to judge how well they're doing, recognize what's hard, and focus on what matters rather than treating everything as important.[66] How they respond to setbacks is taking shape too—some will begin to look at what went wrong, adjust and try again, while others will shut down, withdraw, or stop trying when something feels hard.[67]

Grades 6-8







In grades 6-8, identity becomes the central part of development. Young adolescents begin actively exploring who they are, including their racial, ethnic, and other social identities,[68,69] and their sense of self becomes central to the decisions they make.[70,71] Peer approval now outweighs adult approval,[72,73] though teacher relationships remain a pivotal source of stability and belonging.[74] A sense of purpose begins to develop,[40,75] alongside a growing critical awareness of injustice and the belief that they can act on it.[41,76] This shift is described as becoming a "motivated agent," guided by one's own values and goals.[77] At the same time, intrinsic motivation and school engagement drop more steeply than at any other time,[31,32] driven substantially by a mismatch between young adolescents' growing needs for autonomy, competence, and belonging and what typical learning environments offer.[4] This makes these years a high-stakes, high-opportunity window for agency.

The Agency Cycle in Grades 6-8

Set Meaningful Goals. Young adolescents become capable of abstract and hypothetical reasoning, making long-term goals possible for the first time.[78,79] Emerging purpose and identity increasingly influence which goals feel worth pursuing.[40,77] Their sense of the future is still short, as thinking in terms of months and years mostly develops after age 14.[80] Therefore, a young adolescent can genuinely want a big, long-term goal while struggling to feel how far away it really is.

Make a Plan. Planning and strategic thinking keep advancing,[81] and young adolescents can reason about steps, contingencies, and resources in ways younger learners can't. However, there is a gap between plan and follow-through: the brain's reward and impulse control systems mature faster than its self-regulatory control during this window,[81,82] so a strong plan is not yet a reliable predictor of sustained execution.

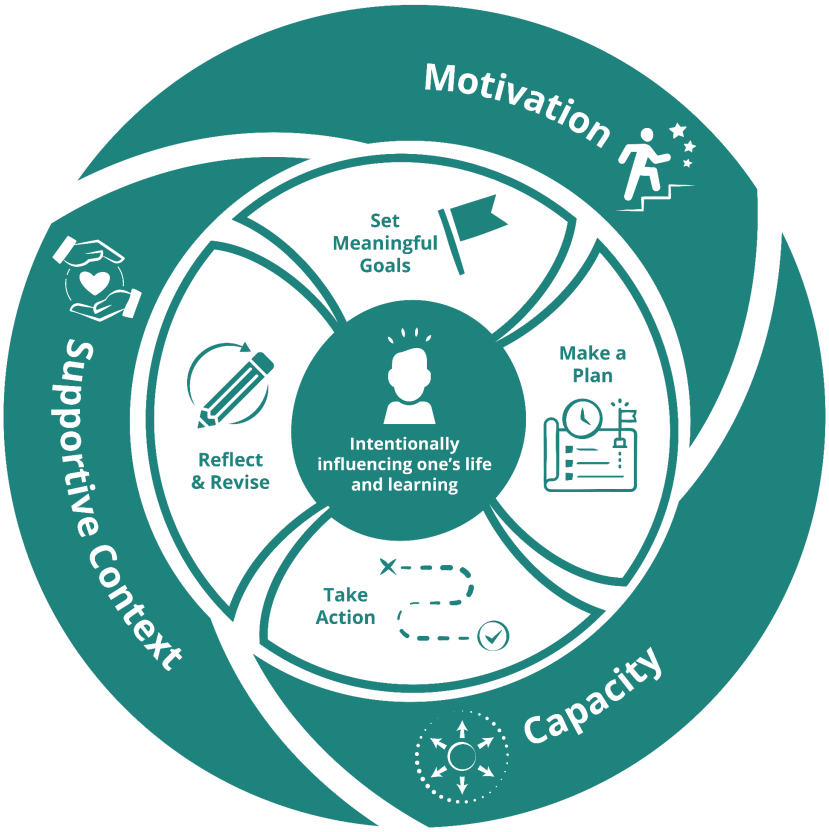
Take Action. Action now carries social weight: peer approval matters more than ever, and trying hard or speaking up can feel socially risky.[83] Even small departures from the group like pursuing a different interest, taking a different position, or caring about something friends don't carry a high social price at this age, meaning action is shaped as much by peers as by capability. At the same time, this is when acting together becomes truly powerful. Young adolescents grow more aware of injustice and more convinced they can do something about it.[41] Their flexible thinking, concern for others, and openness to new ideas make this a particularly opportune age for collective action and leadership.[42,43]

Reflect & Revise. Metacognition keeps deepening, and by the end of this band, what matters is not so much whether learners reflect but how skillfully they do it.[84] How young adolescents respond when a plan falls short matures across this band, as younger adolescents tend to focus first on how a setback feels, while older ones increasingly focus on what to do about it.[855]

While development tells us what young people are ready for at each age, readiness alone doesn't foster agency. In the next section we will look at what does: the three drivers of agency—motivation, capacity, and supportive context.

WHAT DRIVES AGENCY?

This section describes three drivers that enable agency. These include an individual's ***motivation*** and ***capacity*** as well as the support that characterizes their surrounding ***context***.[86,87] The relationship among these drivers is dynamic and ever evolving—for example, an individual can become more capable of agency over time as new capacities develop and can also feel more efficacious, and in turn motivated, in one context than in another.



Sources: (Bandura, 2001, 2006, 2018; GripTape, 2023; Manyukhina & Wyse, 2019; Next Generation Learning Challenges, 2017; Poon, 2018a; Red Bridge, n.d.; Transcend, 2022; Transforming Education & New Schools Venture Fund, 2017). The components of learner agency used in this graphic draw heavily from those outlined in Jenny Poon's article, Part 1: What Do You Mean When You Say "Student Agency"?.

Motivation

Enacting one's agency is hard work and requires the motivation to take risks, invest effort, and persist. Motivation is dependent on a number of factors, including an individual's self-efficacy, their sense of control, their emotional state, their connectedness to others, and the value they see in the work they are doing.[28,29,30] Intrinsic motivation for academic learning follows a well-documented developmental arc, declining as learners age unless learning environments evolve to meet their changing needs.

Capacity

A wide array of knowledge, skills, and mindsets support agency. These include learning strategies and habits, academic knowledge and skills, cognitive thinking skills, positive mindsets, a secure sense of self, and more. When these individual capacities expand, young people are able to exercise their agency in increasingly varied and meaningful ways.[6] Across the K-8 years, nearly every capacity agency requires, from planning and self-regulation to metacognition and abstract thinking, is getting stronger with use.

Supportive Context

A context that is supportive of agency provides individuals with the relationships, opportunities, and resources needed to safely take risks, feel seen, overcome challenges, tackle meaningful goals, and drive their learning. These supports help an individual navigate challenges that crop up while working toward their goals.[9,88] As learners grow, what they require from a supportive context evolves. A kindergartner and an eighth grader need different relationships, different opportunities, and different amounts of independence.

The Relationship Between Drivers

The relationship between the drivers is dynamic and ever evolving; they work together to either further agency or impede it. For example, there is a self-reinforcing cycle between motivation and individual capacity. When a new skill is learned or used to succeed at a challenging task, it increases self-efficacy, further fueling one's motivation to work hard and persist.[28,29,30] On the other hand, if one doesn't have the competencies needed in a given context, it impedes motivation and agency. Additionally, opportunities to enact one's agency can be incredibly motivating, whereas extensive restrictions and requirements for compliance can decrease motivation. These opportunities also enable individuals to transfer and apply new knowledge, skills, and mindsets to different contexts, in turn strengthening their capacity.

The rest of this section describes these key drivers in more detail. For each, we explain why it matters for agency, the science behind it, and related K–8 developmental insights.

Motivation

Why Motivation Matters



Enacting one's agency is hard work. It requires perseverance and dedication. For individuals to persevere, they must be deeply motivated to do so. As a result, motivation—or the willingness to start, put in effort, and persist—is a key driver of learner agency. Motivation helps an individual take risks, make investments, try new things, and persist even when they confront obstacles.

Unpacking Motivation

A number of factors can drive or block one's motivation:

- **Self-efficacy:** An individual's self-efficacy—or belief in their ability to succeed—influences their motivation. Self-efficacy also forms part of one's identity, influencing how they see themselves. To build self-efficacy, individuals must experience success with challenging work, which helps them internalize that they are capable.[45,89,90] This type of productive struggle requires that individuals work toward goals that are challenging yet achievable, understand their progress, and have multiple chances to try again and improve.[30]
- **Value:** Motivation is also high when individuals see value in the work they are doing.[30,91] This value could stem from learning being connected to young peoples' interests and goals or from the activities themselves being done in a high-value setting, such as with friends and important adults in one's life.
- **Sense of control:** A sense of control, or autonomy, also influences motivation.[30,92] To support motivation, learning environments can provide learners with appropriate autonomy and control over how, where, and even what they learn as well as remove any external barriers to learning.[30]
- **Emotional state:** Motivation is also impacted by an individual's emotional state and connectedness to others.[30,50] Therefore, it is important for learning environments to support constructive emotions through building positive relationships between learners and adults, as well as between learners and their peers, and establishing warm, joyful spaces for learning with physical and psychological well-being.

How Motivation Evolves Across K-8

Motivation for schoolwork follows a clear arc across K-8:

- **K-2:** Motivation is naturally high. Young children are curious and eager to master new skills.
- **3-5:** A slow decline begins around age 9. This is a crucial window to build habits while drive is strong.
- **6-8:** The steepest drop occurs, especially after the middle school transition. When learners' developmental needs are met, the decline largely stops.

Supporting Motivation Across K-8

Learning environments sustain motivation by meeting learners' needs for competence, value, control, and connection. These needs remain stable but shift in emphasis as learners grow. Learners build self-efficacy through **rigorous learning** and a **focus on goals, progress & mastery**. They find value through **high-value learning activities** and **exploration & play**, and exercise control through **deep, self-directed work** and **shared ownership of the learning**

environment. Finally, they sustain the connection motivation requires through a **safe & trusting culture** and **targeted support**. The well-documented decline in motivation for schoolwork is not inevitable; learning environments that meet these needs can keep it from setting in.

Capacity



Why Capacity Matters

Enacting agency requires a wide range of knowledge, skills, and mindsets. These capacities include the actions involved in agency—goal setting, planning, taking action, and reflecting—and also any specialized skills related to the goal or task at hand. For example, setting meaningful goals requires the skills of self-reflection as well as knowledge about one's interests, strengths, and weaknesses relative to one's "developing sense of where they want to go".[11] Similarly, taking action heavily relies on one's perseverance, learning strategies, and habits, as well as foundational skills like literacy. Gaining new skills and knowledge directly enables and reinforces one's agency. As Jennifer Keys Adair (2014), PhD, a researcher focused on agency and young learners, puts it, "when children's capabilities expand, they can use their agency in more diverse ways, influencing more of what they do both as individuals and as members of a community" (p. 233).

Unpacking Capacity

The range of knowledge, skills, and mindsets that drive agency are expansive. At a minimum, they include:

- **Learning strategies and habits** used to effectively manage one's learning process. Examples of related knowledge, skills, and mindsets include goal setting, planning, adaptability, help-seeking behaviors, and more.
- **Academic knowledge and skills** across content areas and disciplines include literacy, mathematical knowledge and skills, world language, artistic knowledge and skills, and so much more.
- **Cognitive thinking skills—**which are higher order thinking skills that can be applied to solve problems, ideate, create arguments, and take action—include critical thinking, problem solving, creativity, and more. These skills can be applied across a variety of disciplines and settings.
- **Positive mindsets—**such as hope, curiosity, growth mindset, and perseverance—include the "beliefs and dispositions that support a learner in making the most of their time, energy, and circumstances in order to grow and thrive".[93]

- **Secure sense of self**, or a constructive, consistent understanding of who someone is, serves as a guide when making decisions and engaging with the world around them. Self-awareness, self-efficacy, belonging, sense of purpose, and the like are all part of the knowledge, skills, and mindsets that make up a secure sense of self.

How Capacity Evolves Across K-8

The capacities required to build agency develop steadily across K-8:

- **K-2:** Foundational skills form: early literacy, numeracy, executive skills and strategy use. These are mostly modeled and adult-supported.
- **3-5:** Learners begin to deliberately use strategies to manage their learning. Metacognition and planning skills begin to develop, though a new strategy takes great effort at first.
- **6-8:** Learners become capable of abstract reasoning and longer-term planning. Self-regulation develops more slowly than the drive to act, so judgement lags behind capability.

Building Capacity Across K-8

Because capacities are built through use, a variety of practices that support agency offer opportunities to develop them. Learners strengthen **learning strategies and habits** through instruction and **metacognitive reflection, feedback, and self-knowledge.** They build academic knowledge and cognitive skills through **rigorous learning** and **deep, self-directed work.** Lastly, they develop a secure sense of self through identity-affirming relationships within a **safe & trusting culture** and work connected to their interests, goals, and backgrounds through **high-value learning activities.** Capacities evolve as learners grow, from adult supported to deliberate to self-directed, but at every age they are built through practice and meaningful work.

Supportive Context



Why Supportive Context Matters

Agency is influenced by one's context. Even when an individual is deeply motivated and has a wide range of knowledge, skills, and mindsets, their context can either support or inhibit their ability to intentionally influence their life and learning. For example, agency may be encouraged in some school spaces and not others, at home but not at school, only during specific times of day, or only in specific subjects. A context that is supportive of agency enables diverse expressions of agency, provides support and resources, and helps create the conditions for agency to flourish. In particular, a person's community, school, and family contexts—and the relationships, opportunities, and resources that characterize these contexts—all play a role.

Unpacking Supportive Context

Agency is shaped by a variety of contextual factors:

- **Relationships:** An individual's sense of agency is shaped by their relationships with peers, parents, educators, community members, etc.[86,87] Supportive individuals and communities empower individuals to take responsibility for their own learning, respect their decisions, and provide a balance between freedom and structure. They also listen to young people and respond sensitively and reliably with questions, ideas, and actions. This helps young people feel safe, heard, and cared for and supports the development of secure attachments.[25] When these close adult relationships exist, children are more likely to explore, take risks, experiment, and interact with others with confidence.[25,94]

- **Opportunities:** Contexts supportive of agency provide individuals with opportunities to enact their agency through choice, expressions of their thoughts and feelings, and flexibility. They also minimize excessive restrictions and control over children's actions and voices. People develop their agentic capacity through *years and years* of access to opportunities to practice agency. Big and small opportunities to make choices, exercise their voice, explore, and self-direct enable diverse expressions of agency.

- **Resources:** Individuals also need access to enabling resources. Support systems, material resources, and various forms of capital help individuals navigate personal, structural, and/or institutional obstacles that they may encounter while learning.[9,89] Agentic individuals, when ready, will also leverage these resources to overcome challenges and accomplish goals that are meaningful to them and their communities.

How Supportive Context Evolves Across K-8

What learners need from their environment shifts as the grow:

- **K-2:** Learners need warm, reliable relationships with trusted adults. They also need enough independence to access materials and help.
- **3-5:** Trusted adults are still central, but peers matter more. Learners need room to work together and genuine responsibility to manage.
- **6-8:** Belonging becomes a central need in learning environments. Learners require respect, autonomy, and real voice in how things run.

Creating a Supportive Context Across K-8

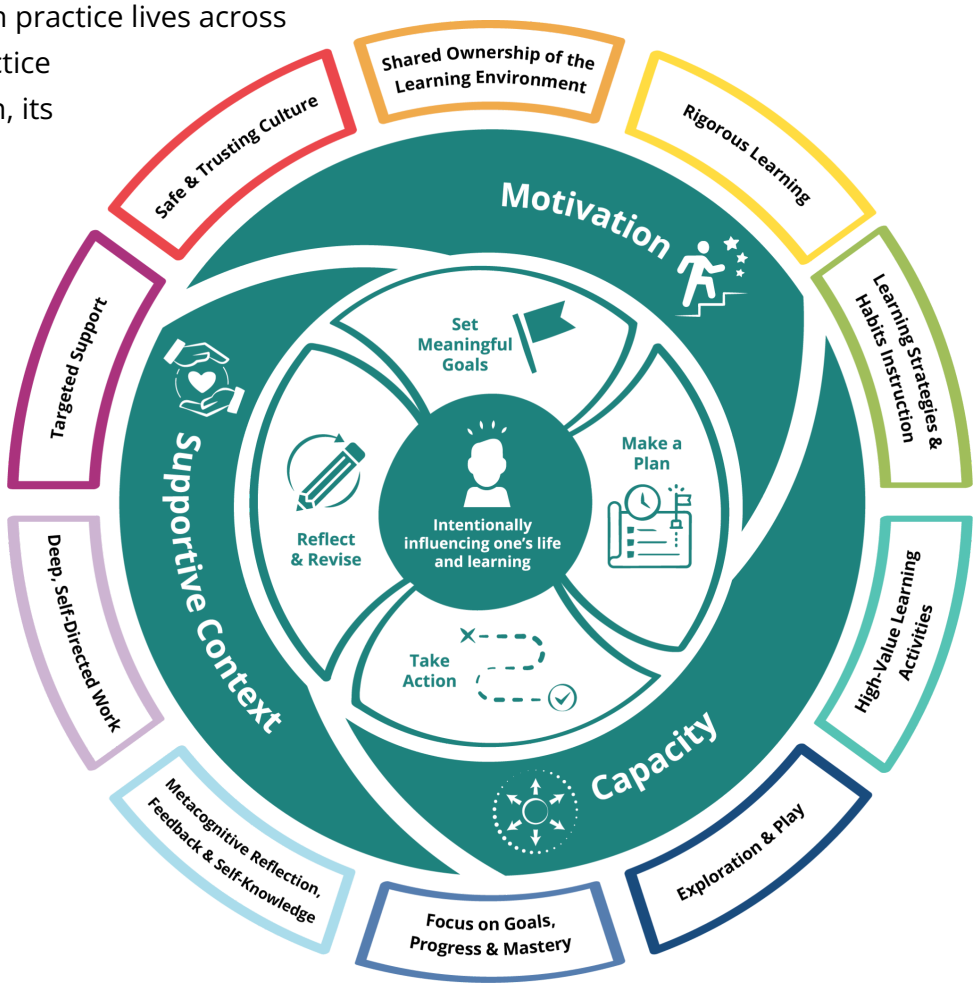
The type of context offered by a learning environment can either invite or shut down agency. The presence of the agentic practices most directly shape whether learners experience a supportive one. Strong relationships are built through a **safe & trusting culture** and **targeted support** from

adults who know each learner well. Opportunities to exercise agency come through **deep, self-directed work**, **shared ownership of the learning environment**, and **high-value learning activities**. The ability to access resources (e.g. materials, spaces, tools) and the freedom to use them grows through **shared ownership of the learning environment**. What shifts across the grades is how far that independence extends: from a kindergartner reaching the supply shelf to an eighth grader choosing to work in a specific place in the building most suited to the task at hand.

HOW TO SUPPORT AGENCY IN PRACTICE

Cultivating learner agency requires a thoughtful balance between support and independence. All learners, at every grade, will have areas where they have strong agentic skills and other areas where they need more practice. However, this does not mean we should prevent learners from enacting their agency based on their current stage of development and the competencies they do have. Like reading, the capacities that underpin agency—the ability to set meaningful goals, plan, take action, and reflect—are built over time and strengthened with practice. Because of this, our learning environments must provide these opportunities to practice at every age, with adult planning and support that evolves as learners grow.

In the following section, we present ten agency-promoting school practices that can serve as inspiration when designing learning to foster agency across K–8 settings. We developed this set of practices by identifying common themes in what forward-thinking schools are doing to support agency development, and we have refined them over several years of learning from and with schools, to reflect how each practice lives across the full K–8 span. Each practice includes a short description, its alignment to the drivers of agency, a look at how the practice evolves across the grade bands, and guidance for how different stakeholders might get started in K–2, 3–5, and 6–8.



Agency-Promoting School Practices

Safe & Trusting Culture	A safe and trusting culture creates the context in which learners feel seen, known, and valued as whole people—and where their voices, wonderings, and needs are respected and nourished proactively.
Shared Ownership of the Learning Environment	Structures that encourage and embolden learners to navigate, care for, and shape their learning environment help create the conditions for agency to flourish.
Rigorous Learning	Through challenging content, evidence-based instruction, and learners doing the majority of the thinking, young people master academic knowledge and skills that support agency.
Learning Strategies & Habits Instruction	Instruction on learning strategies and habits helps learners practice and master new skills that support them to drive their learning.
High-Value Learning Activities	High-value learning activities seamlessly integrate learners' interests and curiosities with standards-aligned content and skills in developmentally appropriate ways.
Exploration & Play	Exploration and play are contexts where learners can enact their agency by actively defining and pursuing their interests and goals in joyful, meaningful, and engaging ways.
Focus on Goals, Progress & Mastery	A focus on goals, progress, and mastery makes young people's learning and the process that got them there visible.
Metacognitive Reflection, Feedback & Self-Knowledge	Metacognitive reflection, high-quality feedback, and growing self-knowledge help learners engage in the self-evaluation needed to reach their goals and understand who they are now and in the future.
Deep, Self-Directed Work	When engaging in deep, self-directed work, learners build perseverance and do the "heavy lifting" for their own learning.
Targeted Support	Targeted support provides avenues through which learners can identify their need for help, self-advocate, and receive additional support.

Safe & Trusting Culture

A safe and trusting culture creates the context in which learners' voices, wonderings, and needs are respected and nourished proactively. In these settings, learners can take risks and enact their agency in meaningful ways. Positive relationships with others are an important factor in creating safe, nurturing environments. These environments ensure learners feel seen, known, and understood, and are spaces where they are able to talk about their feelings, emotions, and ideas without judgment. They are spaces for learners to practice their agency, help create a sense of belonging, and support learners to overcome challenges as they pursue meaningful goals.

Drivers



Motivation

Creates a sense of belonging and connectedness to others that supports learners' risk-taking and persistence.



Supportive Context

Provides the trusting relationships and sense of safety that lets learners take risks and fully be themselves.

What a Safe & Trusting Culture Looks Like Over Time:

- **In K-2, it looks like warm, reliable relationships with trusted adults.** Children look to trusted adults for cues about what's safe to try, and close individual relationships equip teachers to create "just-right" opportunities for social, emotional, and intellectual risks.
- **In 3-5, it increasingly means trust among peers.** Friendships now run on loyalty and confidence-keeping,[38,39] and learners have begun measuring their worth against one another.[48] Safety at this age includes not being compared, ranked, or embarrassed in front of the group.
- **In 6-8, it means respect.** At this age, trying hard or speaking up in front of peers can feel socially risky.[17] A sense of belonging is harder to hold onto than in earlier grades.[95] Thirdly, young people are actively working out who they are.[68] A trusting culture has to make it safe to care, to disagree, and to be oneself.

Dive Deeper

Learn more about implementing a Safe & Trusting Culture in your context

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How to get started if you are a K-2 teacher:

- **Co-create community agreements.** These shared agreements, which replace teacher-created rules, help all learners feel physically and psychologically cared for and invested in collective ownership of norms. Reinforce the agreements consistently through clear expectations. (Check out: Code of Cooperation from Lindsay Unified School District)
- **Develop a consistent schedule and routines.** Create an intentional daily schedule and stick to it as much as possible. Design, teach, and use classroom routines that prioritize safety and belonging while maximizing children's autonomy. (Check out: Consistent Routines from the Whole Child Model)
- **Be a warm, steady, and secure presence.** Be a secure attachment figure. Use intentional language and tone to give clear directions and narrate behavior that meets expectations—staying calm, empathetic, and assertive even in response to children's strong emotions. (Check out: Language of Safety, Language of Empathy & Maintaining Composure from the Whole Child Model)
- **Praise learners for their effort and the strategies they are using**. For example, *"You used straight lines and curvy lines in your painting. You worked hard to show trees in your artwork!"* This builds children's confidence to take on the next challenge.
- **Embrace failure and celebrate mistakes.** Create a "safe-to-fail" classroom culture where mistakes are a valuable part of learning and where learners are encouraged to support each other.
- **Create regular opportunities for learners to discuss their emotions and work through problems as a group.** For example, in community meetings, learners can discuss challenges and develop solutions with peers. Explicitly teach ways to talk about emotions and simple conflict resolution. Anticipate and accommodate when children may need check-ins, like after recess.
- **Ensure learners feel seen, known, and understood.** Get to know learners individually, regularly check on how they're doing personally and with their learning goals, and ensure children see their backgrounds and identities reflected in the classroom. (Check out: Belonging for All from the Whole Child Model)
- **Grow positive relationships with learners, and also among learners.** For example, use team-building and partnering activities during morning meetings so learners get to know each other and work collaboratively—practicing presence, playfulness, appropriate touch, and eye

contact along the way. (Check out: Strong Start & Close Resources from the Whole Child Model)

- **Promote perspective taking.** Help learners to notice, navigate, and resolve situations in which their individual perspectives may diverge from or be in conflict with others.

How to get started if you are a 3-5 teacher:

- **Co-create community agreements.** These shared agreements, which replace teacher-created rules, help all learners feel physically and psychologically cared for and invested in collective ownership of the norms. Revise these agreements as the year unfolds. (Check out: Code of Cooperation from Lindsay Unified School District)
- **Build routines that hand over responsibility.** Keep a predictable structure that supports safety and belonging, and steadily shift ownership of routines to learners: classroom jobs, transitions, and materials they manage themselves.
- **Be a steady, trusted adult.** Serve as a secure attachment figure—warm, consistent, and calm in response to strong emotions. Use intentional language and tone to give clear directions and redirect respectfully, and keep investing in your relationship with each learner. (Check out: Language of Safety, Language of Empathy & Maintaining Composure from the Whole Child Model)
- **Praise learners for their effort and the strategies they are using.** For example: *"You tried two different ways to organize your paragraph before picking one. That planning paid off!"* This builds learners' confidence to take on the next challenge.
- **Embrace failure and celebrate mistakes.** Create a "safe-to-fail" culture where mistakes are a valuable part of learning and never a source of public embarrassment.
- **Protect learners from comparison and ranking.** Avoid public displays that rank learners against one another (e.g., charts, leaderboards). Keep progress personal and growth-focused.
- **Create regular opportunities for learners to discuss their emotions and work through problems as a group.** Explicitly teach language for emotions and disagreement, and increasingly let learners lead. Teach conflict-resolution steps they can use with one another and use class meetings for peer-developed solutions.
- **Ensure learners feel seen, known, and understood.** Get to know learners individually, checking in regularly on how they're doing personally and with their learning goals, which fosters the trust learners need to take risks. (Check out: Belonging for All from the Whole Child Model)
- **Grow positive relationships among learners.** Use collaboration structures (e.g., rotating partners or roles, small-group work) so trust builds across the whole class, not just within friend groups. Watch for exclusion and quietly disrupt it. (Check out: Strong Start & Close Resources from the Whole Child Model)

- **Promote and support perspective taking.** Help learners notice, navigate, and resolve moments when their perspectives conflict with others' needs.
- **Make the classroom affirming of every learner's identity.** Ensure learners see their races, cultures, languages, and more reflected and valued—in materials, examples, and whose ideas get lifted up. Interrupt stereotypes when they surface.

How to get started if you are a 6-8 teacher:

- **Co-create community agreements, and treat them as living documents.** Together, shape the agreements for how the community treats one another, and revisit/revise them when things fray. (Check out: Collaborative Norms from EL Education)
- **Keep structures predictable and expectations clear.** Be consistent about how things work in the classroom (e.g., routines, deadlines, help-seeking) so learners always know where they stand.
- **Structure participation so trying is safe.** Use small groups, written responses, and think-pair-share before whole-class shares, and give learners a heads-up before asking them to speak rather than cold-calling. This ensures participation doesn't cost learners' social standing.
- **Protect learners' dignity.** Build a private-correction habit—proximity, a quiet word, a note, rather than a callout across the room. Ask learners how they like to be recognized before praising them publicly, and handle conflict in ways that let learners save face.
- **Be an adult learners can count on.** Follow through visibly; if you say you'll look into something, report back. Track 1:1 check-ins so no learner goes long without connecting with you.
- **Build structures for connection and belonging.** Use team challenges, rotating collaborative roles, and class meetings so every learner has regular, structured chances to connect—including space to name what they're feeling, process challenges, and work through problems as a group.
- **Offer positive ways to be seen.** Give real responsibilities and opportunities to showcase varied kinds of work (with learner consent) and build recognition rituals learners help design.
- **Keep progress personal.** To support motivation, avoid public grades and ranking. Share individual progress privately and focus it on growth.
- **Make the classroom affirming of every learner's identity.** Represent learners' racial, ethnic, gender, sexual identities, and more in what the class reads, discusses, and celebrates. Interrupt bias immediately and consistently.
- **Teach learners to disagree well.** Offer sentence frames for challenging ideas, run structured debates or Socratic seminars, and create a visible channel for questioning classroom decisions—then receive that dissent non-defensively. (Check out: Fostering Civil Discourse from Facing History)

How to get started if you are a site or systems leader:

- **Build strong relationships with and among adults.** Get to know your staff and create explicit opportunities for them to build relationships with each other. Be a steady, supportive presence staff can rely on. Lastly, put structures in place that help learner-facing staff stay composed in hard moments (e.g., a call-for-help or tap-out system). (Check out: Adult Well-Being from the Whole Child Model or Modeling Strong Relationships Among Staff Members form the Search Institute)
- **Make sure every learner is known well by at least one adult.** Develop systems that help teachers build relationships with all learners like check-ins, looping, home visits, and more. *Beyond K-2, where learners move between many teachers, this often takes deliberate structures like advisory to guarantee no learner slips through without being deeply known.*
- **Ensure behavior systems help learners take ownership of their emotions, actions, and words—and their impact.** Ground systems in the belief that relationships and belonging come first, and closely examine any that rely on external rewards or public comparison (e.g., point systems, prizes, clip charts, public data walls, posted infractions). Where external rewards are used, give learners a voice in what they are. *As learners get older and peer status matters more, pay particular attention to systems that make consequences or standing visible to peers.*
- **Ensure the school's culture affirms every learner's identity.** What the school celebrates, displays, and recognizes—from assemblies to hallway walls to who gets named for what—should reflect all the learners in the building.
- **Ensure the school's culture demonstrates an authentic belief in learners' ability to be agentic.** Norms, routines, and practices should reflect real trust in learners to drive their learning, including making it safe for learners to question decisions and raise concerns.

Shared Ownership of the Learning Environment

Structures that encourage and embolden learners to navigate, care for, and shape their learning environment help create the conditions for agency to flourish. That environment is more than the physical space: it includes the routines and systems that organize the day and the ways the community makes and upholds its decisions. When learners have real ownership over these, adults and young people become co-agents. An intentionally designed environment that grows and adapts with learners enables independence, collaboration, and learners' belief that they have an impact on their community. Ownership gives learners the opportunity to practice their agency and make the learning environment their own, which can be incredibly motivating.



What a Shared Ownership of the Learning Environment Looks Like Over Time:

- **In K-2, ownership means caring for the shared space.** Children can take responsibility for the environment: classroom jobs, tidying shared materials, helping decide where things live. Even the youngest learners can help shape how their community runs, and doing so builds their belief that they have an impact.[20]
- **In 3-5, ownership extends to routines and systems.** Learners can genuinely run more of the classroom: managing transitions, materials, and jobs with less adult scaffolding, and taking on real roles in how the day works.[49] As learners begin to see rules as things a community shapes rather than fixed adult decisions,[65] they're ready to help make and revise the systems that impact them.
- **In 6-8, ownership grows into shared governance.** Young adolescents are ready to help decide how the community actually works: shaping policies, weighing in on decisions, and holding one another accountable to what the group agreed.[96,97] Their growing need for autonomy requires meaningful responsibility, as they can tell the difference between genuinely helping decide and being asked for token input.[4]

Dive Deeper

Learn more about implementing a Shared Ownership of the Learning Environment in your context

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How to get started if you are a K-2 teacher:

- **Ensure the physical space is set up for different types of learning.** Create different spaces so learners can choose where and how to work: movable, child-sized furniture, and areas for both collaborative and solo work. Flexible, welcoming classrooms together with other design decisions (e.g., light, ownership, air quality) can positively impact learning outcomes.[98]
- **Organize physical space to enable independence and ownership.** Ensure the physical space and the objects in it are accessible so young learners can reach materials, organize their belongings, etc. independently. Create materials labels with pictures and words and having alternative seating choices and child-height shelving to support independence.
- **Ensure the design of the physical space is warm and welcoming.** This includes displaying pictures of children and families, incorporating natural elements, and using decorations that reflect learners' cultures. (Check out: Classroom Design from the Whole Child Model)
- **Decorate the learning space with learners' work and give them voice in the room's look and feel.** Display work-in-progress, not just final products, so learners take pride in where they are in the process. Consider having learners choose a theme for the space or create meaningful wall materials themselves, such as word-walls or icons for the class birthday graph.
- **Act as a proactive curator and guide during learning.** Regularly review wall displays, anchor charts, and other materials to keep the room current with learners' needs and free from visual clutter so what surrounds learners stays accessible, engaging, and supportive of agentic action.
- **Introduce classroom roles and responsibilities.** Classroom jobs help build learners' sense of ownership as they become co-agents responsible for keeping the classroom running. They also build self-efficacy through a job well done. (Check out: Classroom Jobs from the Whole Child Model)
- **Invite learners into real decisions about how the classroom runs.** Even young children can help decide things that affect the whole community (e.g., how to line up, how cleanup should work). Start small and let the decisions carry real weight in the classroom.

How to get started if you are a 3-5 teacher:

- **Set up the physical space for different types of learning and let learners help shape it.**

Create areas for collaborative and solo work, and give learners choices about where and how to work. Involve learners in deciding how the room is arranged, and revisit the setup together when it isn't working. Flexible, welcoming classrooms, together with other design decisions (e.g., light, ownership, air quality), can positively impact learning outcomes.[98] (Check out: Classroom Design from the Whole Child Model)

- **Organize the space so learners can run it themselves.** Materials, supplies, and organizational systems should be fully accessible without adult help. Learners this age can manage distribution, collection, and upkeep of shared resources on their own.
- **Decorate the learning space with learners' work and hand over more of the decisions.** Display work-in-progress, not just final products, so learners take pride in where they are in the process. Let learners curate displays, decide what goes up, and refresh the room as their work and interests change. (Check out: Displaying Student Work from Responsive Classroom)
- **Hand over real responsibility, and let learners work through the mistakes.** Start by giving up control of something you'd normally manage, and resist stepping in if it gets messy. Working through struggles is part of how learners build responsibility.
- **Turn classroom jobs into real systems learners own.** Move beyond assigned tasks toward learner-managed systems; rotating roles learners help design, train each other on, and improve. Jobs build ownership and self-efficacy through real responsibility. (Check out: Classroom Jobs from the Whole Child Model)
- **Give learners real roles in how the classroom runs.** Learners this age can help make and revise classroom systems: how transitions work, how materials get shared, how the schedule flows. Bring problems to the group ("*Our cleanup routine isn't working. What should we change?*") and implement what they decide.
- **Build structures for learners to make decisions together.** Use class meetings or simple Congress-like structures where learners propose, discuss, and vote on changes that affect the community and hold one another accountable to what the group decided.
- **Give learners real responsibility for one another.** Build roles and routines where learners take care of their community, like preparing and sharing food or supporting peers who were absent. Caring for others is a very meaningful type of ownership.

How to get started if you are a 6-8 teacher:

- **Set up the space for different ways of working and let learners shape it.** Create room for collaboration, focused solo work, and choice about where and how to work. Involve learners in arranging the room and revisit it together when it isn't working. Flexible, welcoming classrooms, together with other design decisions (e.g., light, ownership, air quality), can positively impact learning outcomes.[98]

- **Organize the space so learners can run it without you.** Materials, supplies, and organizational systems should be fully accessible as learners this age can manage distribution, upkeep, and troubleshooting of shared resources end to end, and train each other to do it.
- **Allow learners to make the room theirs.** Let learners curate what goes on the walls—including work in progress—and shape the look and feel of the space so it reflects who they are and what they're proud of. (Check out: Displaying Student Work from Responsive Classroom)
- **Trust young adolescents with real responsibility.** Give young adolescents ownership of things that matter, and hold steady if they struggle. Waiting until young adolescents prove ready keeps them from becoming ready.
- **Hand over the systems that run the classroom.** Learners can own them nearly end to end: running the turn-in and return process for work, managing shared materials, or planning and preparing food for the community. When a system isn't working, bring it to the group (*"Our review routine isn't working. What should we change?"*) and implement what they decide. (Check out: Classroom Job Descriptions & Application from Edutopia)
- **Build structures for learners to make decisions together.** Use class meetings where learners propose, discuss, and vote on changes that affect their community, and hold one another accountable to what the group decided. (Check out: Student Voice in the Classroom from Search Institute)
- **Give learners real responsibility for one another.** Build roles where learners support their community: orienting new students, supporting peers who were absent, mentoring younger learners where school structures allow.

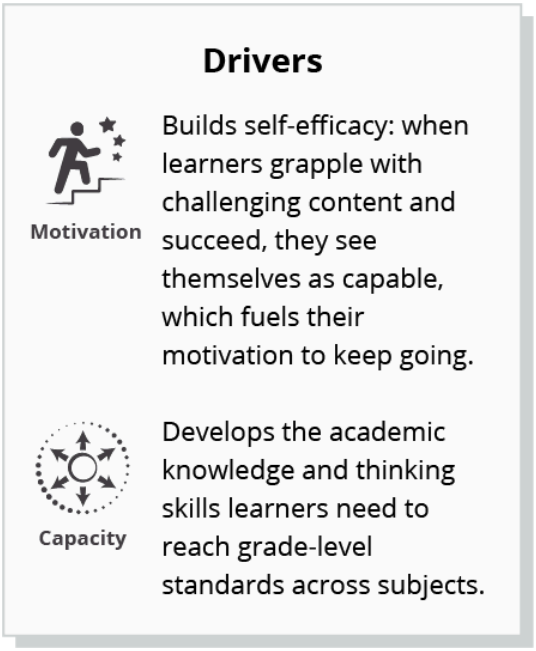
How to get started if you are a site or systems leader:

- **Set school-wide norms for classroom setup, and create a welcoming physical environment throughout the building.** Consider shared spaces like staff lounges, offices, and hallways, and have staff walk through each other's classrooms to give feedback at the start of the year.
- **Talk to teachers before investing in furniture and organizational supplies.** Prioritize flexibility, such as furniture that serves multiple purposes and can be rearranged by learners, and organizational systems learners can manage without adult help. *In the early grades this also means furniture sized for and maneuverable by young children.*
- **Provide professional learning on sharing ownership with learners.** Most educators haven't had the chance to consider how much of a classroom's daily operation learners can

genuinely run. Encourage staff to learn from one another and visit classrooms where learners hold real responsibility.

- **Provide funding and permission for learner-shaped spaces.** Agree on parameters like look and feel or school and district regulations, then trust teachers and learners to make spaces their own.
- **Create structures for learner voice in real decisions.** *In the early grades, this means age-appropriate voice in classroom and school routines. By the upper-elementary and middle grades, this grows, for example to a student council or congress with genuine authority over real things like recess norms, lunch systems, shared-space design, and input on schoolwide changes. Coordinate representation so it isn't only the most confident learners who participate.* (Check out: Student Voice in the School from Search Institute; Student-Led Advisory Councils or Boards from Learner-Centered Collaborative)
- **Give learners real operational roles in the life of the school.** Learners across the grades can run systems such as morning announcements, the library, recess equipment, tours for visitors and prospective families, the tech help desk, staffing school events. They should be matched to what each age can take on with training and trust.
- **Build cross-age mentoring structures.** Pair older learners with younger ones as mentors, reading buddies, or orientation guides. *This lands especially well in the middle grades, when young adolescents are beginning to develop purpose beyond themselves.*
- **Audit school rules and defaults for trust.** Many policies assume adults must grant permission for things learners could handle (e.g., moving through the building, accessing spaces and equipment, organizing, leading). Review them, and where safety allows, shift toward learner ownership as the default. *The older the learners, the further this can extend.*
- **Make learner ownership a schoolwide expectation.** Explicitly signal that learner-run routines, real responsibilities, and age-appropriate voice in decisions are how the school works.
- **Hire educators who excel at building learner-owned environments.** Look for teachers strong at setting up spaces and systems that let learners own their movement, materials, and daily operations.

Rigorous Learning



Through challenging grade-level content, evidence- based instruction, and learners doing the majority of the thinking, young people master academic knowledge and skills that support agency. Rigorous content—work that meets or exceeds grade-level expectations, with scaffolds that ensure access and extensions that invite deeper learning—is a necessary foundation. Learners are stretched when they grapple with open-ended problems while teachers step in strategically rather than supplying answers; when they defend ideas with evidence, weigh and compare approaches, and apply knowledge to new contexts to create original work; and when tasks build factual, conceptual, and procedural understanding while expanding their thinking through multiple perspectives and interpretations. Access to rigorous learning can expand capacities across content areas and positively influence how learners see themselves as well as their motivation to learn.[99,100,101]

What Rigorous Learning Looks Like Over Time:

- **In K-2, rigor means real thinking about concrete things**. Children reason through direct experience rather than abstraction,[46,49] so rigorous learning looks like grappling with hands-on problems, explaining their thinking, and trying another way when the first doesn't work. Even the youngest learners can do the majority of the thinking when the problem is real and within reach.
- **In 3-5, rigor means learners reasoning their way through.** Learners can now follow and build logical chains, judge how their work is going, and deliberately use strategies.[61,66] Rigorous learning asks them to explain and defend their reasoning, compare approaches, and stick with problems that don't resolve quickly. Because learners this age attempt what they believe they can do,[45] the stretch has to be right for each learner: challenging, but doable.
- **In 6-8, rigor means abstract thinking about real questions.** Young adolescents can reason hypothetically, weigh competing perspectives, and evaluate evidence for the first time.[78,79] Rigorous learning puts genuinely open questions in front of them, where they have to defend positions, synthesize across sources, and apply knowledge to unfamiliar

problems. Given that visible effort carries social weight at this age,[17] rigor requires a culture where hard thinking is safe to do in public.

Dive Deeper

Learn more about implementing Rigorous Learning in your context

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How to get started if you are a K-2 teacher:

- **Use standards-aligned assessments to understand what learners know, what they are still working on, and how their learning is progressing.** When you know what your learners know and can do, you can effectively differentiate instruction, scaffold lessons, and engage them in more purposeful practice.
- **Ensure all learners have access to high-quality instructional materials and grade-level tasks, with support to reach them.** Research shows that when learners, regardless of starting point, have access to grade-level assignments, strong instruction, and support, they rise to the challenge.[99,100,101] Provide scaffolds (e.g., graphic organizers, adaptive technology, peer support) rather than easier work, and incorporate "just-in-time" support on prior skills within grade-level lessons as this helps learners catch up, while traditional remediation nearly guarantees they fall further behind.[100,102] (Check out: Disrupting Barriers to Strong Instructional Scaffolding from TNTP)
- **Let children grapple before you step in.** When a problem is hard, resist supplying the answer; ask a question, point to a resource, or invite another attempt. Even the youngest learners build real understanding and stamina by working through productive struggle.
- **Use evidence-based literacy practices.** To build reading fluency, use instructional practices informed by the science of reading (e.g., explicit and systematic phonics instruction, interactive read-alouds from varied and complex texts).[103] (Check out: The Science of Reading: A Defining Guide from The Reading League)
- **Use evidence-based mathematics practices.** Provide learners with opportunities to discuss and explore mathematical ideas. Ask open-ended questions that have learners reflect on their approach, debate ways of solving problems, and explain their reasoning. For example: "*Why did you choose to group the blocks this way?*" or "*What would happen if ___?*" (Check out: Engaging in Mathematical Discourse from Inside Mathematics; Math Block from The Number Lab)

How to get started if you are a 3-5 teacher:

- **Use standards-aligned assessments to understand what learners know, what they are still working on, and how their learning is progressing.** When you know what your learners know and can do, you can effectively differentiate instruction, scaffold lessons, and engage them in more purposeful practice.

- **Ensure all learners have access to high-quality instructional materials and grade-level tasks, with support to reach them.** When learners, regardless of starting point, have access to grade-level assignments, strong instruction, and appropriate support, they rise to the challenge.[99,100,101] Provide scaffolds rather than easier work, incorporate "just-in-time" support on prior skills within grade-level lessons, and fade scaffolds deliberately as learners grow stronger. (Check out: Disrupting Barriers to Strong Instructional Scaffolding from TNTP)

- **Let learners grapple and step in with questions, not answers.** Mediate discussion rather than lecture; give minimal, targeted feedback; and treat productive struggle as part of learning rather than a problem to fix. Learners this age can stick with hard problems if struggle is normalized in the classroom. (Check out: Strategies That Push Students to Own the Thinking from TNTP)

- **Have learners apply their learning and create original work.** Design tasks where learners take what they've learned into new contexts: investigating problems, transferring skills to unfamiliar situations, and producing original work that shows what they truly understand.

- **Use evidence-based literacy practices.** Word-level work still matters; continue explicit instruction in decoding multisyllabic words and word parts, and build fluency through purposeful practice. Grow the background knowledge and vocabulary required for comprehension. Pair daily work with grade-level and above-grade-level texts, using routines for questioning, finding the gist, and monitoring understanding. Gradually hand those routines over to learners to lead.[104] (Check out: The Science of Reading: A Defining Guide from The Reading League)

- **Use evidence-based mathematics practices.** Build procedural fluency from conceptual understanding: use tasks with multiple entry points and solution paths, have learners connect representations (e.g., objects, drawings, number lines, equations), and pose purposeful questions rather than showing and telling. Structure partner and team work where learners debate approaches and reach consensus, treating productive struggle as part of learning.[105] (Check out: Engaging in Mathematical Discourse from Inside Mathematics; Math Block from The Number Lab)

How to get started if you are a 6-8 teacher:

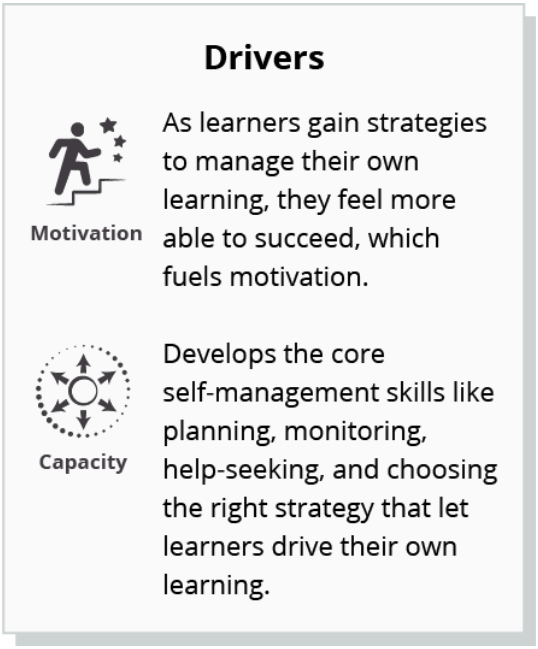
- **Use standards-aligned assessments to understand what learners know, what they are still working on, and how their learning is progressing.** When you know what your learners know and can do, you can effectively differentiate instruction, scaffold lessons, and engage them in more purposeful practice.
- **Ensure all learners have access to high-quality instructional materials and grade-level tasks, with support to reach them.** When learners, regardless of starting point, have access to grade-level assignments, strong instruction, and appropriate support, they rise to the challenge.[99,100,101] Provide scaffolds rather than easier work, incorporate "just-in-time" support on prior skills within grade-level lessons, and increasingly let learners choose which supports they need, so scaffolding builds self-knowledge. (Check out: Disrupting Barriers to Strong Instructional Scaffolding from TNTP)
- **Put genuinely open questions in front of learners and let them grapple.** Use problems with no single right answer, conflicting sources, and competing interpretations. Mediate rather than lecture, give minimal, targeted feedback, and treat productive struggle as part of learning. (Check out: Strategies That Push Students to Own the Thinking from TNTP; Asking Unanswerable Questions from Project Zero)
- **Have learners apply their learning to real problems and create original work.** Design extended, multi-step tasks where learners investigate real-world questions, work with the tools and methods of a field, and share their work with real audiences as learners grow faster when their work serves a real purpose for a real audience.[106]
- **Use evidence-based literacy practices.** Word-level work still matters; continue building decoding of complex, multisyllabic words and purposeful fluency practice alongside the world and word knowledge that comprehension requires.[104] Pair daily work with complex text across subjects with routines for questioning, determining the gist, and monitoring understanding, and have learners defend interpretations with text evidence and synthesize across multiple sources. (Check out: Adolescent Literacy: A Guide from the Reading League)
- **Use evidence-based mathematics practices.** Build procedural fluency from conceptual understanding. Use tasks with multiple entry points, pose purposeful questions, and have learners connect different representations, increasingly linking concrete models to abstract and algebraic forms.[105] Have learners construct arguments, critique each other's reasoning, and reach consensus, treating productive struggle as part of learning. (Check out: Engaging in Mathematical Discourse from Inside Mathematics; Math Block from The Number Lab)

How to get started if you are a site or systems leader:

- **Own academic vision setting and the development of instructional staff.** Articulate a clear, shared vision for high-quality, evidence-based academic learning, including learners doing the majority of the thinking. Set site- and system-wide expectations for what that instruction looks like, then commit to coaching all staff through practice-based development and building systems for looking at learner work and data, and adjusting instruction accordingly.
- **Invest in evidence-based instructional materials.** Ensure the curricular materials at your site and in your system are evidence-based, and procure ones that are if not. Consider adaptive technology as an additional tool, as adaptive learning software can support learners in building the skills needed to master grade-level content.[102] (Check out: HQIM Leader Systems Guide from EdElements)
- **Prioritize and resource professional development on evidence-based instructional practices.** Pair it with ongoing implementation support: using high-quality materials in daily practice and designing evidence-aligned assessments. *The literacy focus shifts across the grades: the science of reading and early number sense in the early grades, upper-elementary literacy in grades 3-5,*[104] *and adolescent literacy as a shared responsibility across every subject by middle school—alongside strong writing and evidence-based mathematics instruction throughout.*[105]
- **Audit system- and school-level decisions to ensure all learners have access to rigorous learning.** Identify and address structures that prevent some learners from experiencing rigorous instruction, grade-level work, and high expectations.[99] *Watch especially for how learners are grouped and who gets pulled from rigorous content for intervention in the elementary grades, and for tracking and course placement by middle school.*
- **Ensure teachers and other school personnel enact high expectations for every learner.** Support staff to reflect deeply on their beliefs, examine common practices that reflect low expectations (e.g., ineffective differentiation, "meeting learners at their level"), and see firsthand what learners can do when given rigorous academic learning experiences.[99]

Learning Strategies & Habits Instruction

Instruction on learning strategies and habits helps learners practice and master new skills that support them to drive their learning. In short, they learn how to learn. While all knowledge, skills, and mindsets are supportive of agency, learning strategies and habits have a special role to play. Cultivating these skills directly builds learners' individual capacity, influences their sense of self-efficacy in positive ways, and gives them new abilities that are needed to enact their agency. These strategies are also too important to leave to chance: some learners pick them up at home or absorb them along the way, while others are never taught them at all and may be read as less capable. Teaching learning strategies explicitly makes them available to every learner.



What Learning Strategies & Habits Instruction Looks Like Over Time:

- **In K-2, strategies live inside routines.** Children don't yet deliberately choose learning strategies; they absorb them through modeled routines and think-alouds. They are just beginning to understand what being a "learner" means.[51] Instruction includes naming the strategy while using it ("*I'm stuck, so I'm going to try a different way*") and repeating it in daily routines until children start using it on their own.
- **In 3-5, learners can use strategy deliberately.** Learners become able to intentionally use strategies to manage their own learning: remembering, organizing, and planning their work.[61,66] However, a newly taught strategy takes a lot of effort and can slow a learner down before it starts to help.[63]
- **In 6-8, the work shifts from learning strategies to choosing them.** Young adolescents can plan strategically, anticipate what a task demands, and draw on a growing repertoire,[81] so instruction should help learners match the right strategy to each situation and understand why it fits. The stakes rise across this band, as learners with strong strategies begin to pull ahead of those without them.[84]



While the literature suggests that learning strategies and habits must be explicitly taught, it is not enough to teach learners goal-setting (e.g., SMART or WOOP goal procedures) or reflection skills in isolation and hope that it fosters agency. It will not. Rather, these foundational skills must be nurtured, taught, and practiced actively and authentically in context to further expand learners' skills and enable agency. This is true at every age—whether it's a 1st grader filling out a goal-setting sheet or a 7th grader sitting through a study-skills unit. By infusing learning strategies and habits and opportunities for practice into learning, you can help learners further develop and reinforce their agentic capacity. (See: Rigorous Learning; High-Value Learning Activities; and Deep, Self-Directed Work)

Dive Deeper

Learn more about implementing Learning Strategies & Habits Instruction in your context

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How to get started if you are a K-2 teacher:

- **Clarify the learning strategies and habits you are trying to teach.** Draw them from your existing graduate profile, school-wide habits of work and learning, or your current curriculum. Consistent language helps learners adopt these skills and apply them across contexts.
- **Balance explicit teaching and discovery learning.** Make intentional decisions about what to teach explicitly and when to let learners discover. Discovery works best when learners have enough prior knowledge to make inferences and time to reflect and make connections.
- **Model learning strategies and habits.** Model how to seek support when stuck, self-advocate, embrace mistakes, set a goal and make a plan, reflect on progress, and adjust course. This helps learners develop their inner voice.
- **Narrate your thinking.** Say your thought process out loud—what you're trying, noticing, and changing—to help learners develop their inner voice and metacognitive thinking.
- **Pair habit goals with academic goals in daily lessons.** When learners take on an academic goal, name the habit or strategy that will help them get there. For example, a goal to finish a piece of writing might pair with a goal to plan before drafting, or to keep going when the work gets hard.
- **Offer varied opportunities to practice learning strategies and habits.** Young learners need repeated practice across new content, contexts, and activities—playful whenever possible. These don't need to be stand-alone lessons; look at the lesson and structure you're

already teaching and choose the strategy that supports it, like teaching a collaboration strategy before group work. (Check out a Work Habits Lesson from Red Bridge)

- **Use 1:1 and small-group conferencing to teach, practice, and reflect on learning strategies and habits.** This is when learners get tailored support on these skills. (See: Targeted Support)
- **Pair strategy instruction with feedback and reflection.** Give process-oriented feedback on how learners used a strategy (*"I noticed you two took turns listening to each other's ideas and then combined them into a new one"*), and ask learners what worked, what didn't, and what they'd try next time. (See: Metacognitive Reflection & Feedback)

How to get started if you are a 3-5 teacher:

- **Clarify the learning strategies and habits you are trying to teach.** Draw them from your existing graduate profile, school-wide habits of work and learning, or your current curriculum. Consistent language helps learners adopt these skills and apply them across contexts.
- **Balance explicit teaching and discovery learning.** Make intentional decisions about what to teach explicitly and when to let learners discover. Discovery works best when learners have enough prior knowledge to make inferences and time to reflect and make connections.
- **Model learning strategies and habits, and start handing over the narration.** Think aloud ("*I'm going to reread this part because it didn't make sense*"), model how to recognize when you're stuck and ask for help well, and increasingly ask learners to narrate their own thinking: what they're trying, what's working, what they'd change. This helps learners develop their inner voice.
- **Teach learners to choose strategies.** When introducing a strategy, name what it's for and when it helps, then build in moments where learners pick from strategies they know and explain their choice.
- **Expect new strategies to be clumsy at first—and keep going.** A newly learned strategy takes real effort and can slow learners down before it helps. Tell learners this directly, and don't abandon a strategy just because the first week is rocky.
- **Pair habit goals with academic goals in daily lessons.** Explicitly teach and reflect on both.
- **Embed learning strategies practice in other content and experiences.** These don't need to be stand-alone lessons: look at the lesson and structure you're already teaching and choose the strategy that supports it, like teaching an organization strategy before a multi-day project. When embedded, these strategies are more likely to stick.
- **Use 1:1 and small-group conferencing to teach, practice, and reflect on learning strategies and habits.** This is when learners get tailored support on these skills. (See:

Targeted Support)

- **Pair strategy instruction with feedback and reflection.** Give process-oriented feedback on how learners used a strategy ("*You made an outline before drafting. How did that change your writing?*"), and ask learners what worked, what didn't, and what they'd try next time. (See: Metacognitive Reflection & Feedback)

How to get started if you are a 6-8 teacher:

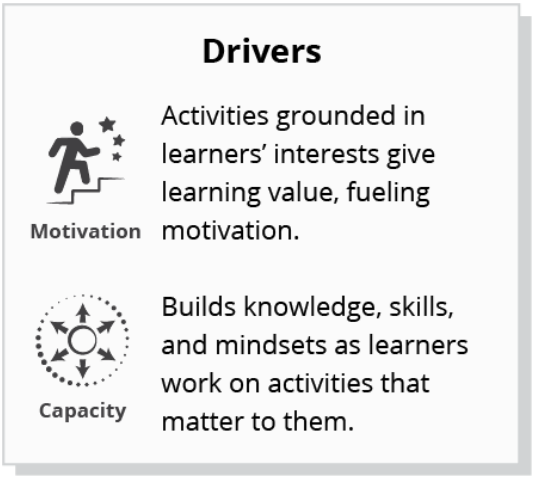
- **Clarify the learning strategies and habits you are trying to teach.** Draw them from your existing graduate profile, school-wide habits of work and learning, or your current curriculum. Consistent language helps learners adopt these skills and apply them across contexts, especially when learners move between many teachers a day. Agree as a team on shared strategies and shared language, so learners aren't relearning the rules in every room.
- **Balance explicit teaching and discovery learning.** Make intentional decisions about what to teach explicitly and when to let learners discover. Discovery works best when learners have enough prior knowledge to make inferences and time to reflect and make connections.
- **Model your thinking and expect learners to narrate theirs.** Think aloud, including how you recognize you're stuck and how you decide whom or what to ask. Make learners' strategy talk routine: have them explain their approach before, during, and after real work. This helps learners develop their inner voice.
- **Teach learners to match strategies to tasks.** Young adolescents can manage a growing repertoire, from learning individual strategies to sizing up a task ("*what will this actually take?*") and choosing accordingly. Have learners plan their approach before starting and defend their choice.
- **Expect new strategies to be clumsy at first—and keep going.** A newly learned strategy takes real effort and can slow learners down before it helps. Tell learners this directly, and don't abandon a strategy just because the beginning is difficult.
- **Pair habit goals with academic goals in daily lessons.** Explicitly teach and reflect on both.
- **Embed learning strategies practice in other content and experiences**. These don't need to be stand-alone lessons: teach the strategy the work in front of them requires, like planning and tracking a multi-week project, taking notes from multiple sources, or preparing for an assessment across several classes. When embedded, these strategies are more likely to stick.
- **Use 1:1 and small-group conferencing to teach, practice, and reflect on learning strategies and habits.** This is when learners get tailored support on these skills. (See: Targeted Support)
- **Pair strategy instruction with feedback and reflection.** Give process-oriented feedback on

how learners used a strategy ("*You broke the project into weekly milestones. Which ones held up, and which would you set differently?*"), and ask learners what worked, what didn't, and what they'd try next time. (See: Metacognitive Reflection & Feedback)

How to get started if you are a site or systems leader:

- **Agree on and develop a shared set of learning strategies and habits.** This creates school-wide alignment and consistency for learners and teachers. Ensure the set reflects what caregivers and the community find important for their young people. *As learners grow, give them a voice in it too. By the middle grades, young adolescents can help define the habits themselves, not just react to them.*
- **Make strategies consistent across every classroom.** *This becomes essential in the middle grades, when learners navigate several teachers a day, each with different systems and expectations.* Use teaming structures and shared agreements so learners meet the same strategies, language, and tools (e.g., planners, notebooks, submission systems) in every room.
- **Provide curricular resources and instructional guidance for integrating learning strategies and habits across the day.** Create, adopt, or adapt a high-quality curriculum that teachers can customize and that is designed to be woven into all parts of a learner's day rather than taught in isolation. Consider instructional approaches, such as project-based learning, that naturally integrate these strategies.
- **Give educators time to make the strategies their own.** A learning strategies curriculum works best when teachers connect it to their learners' lives and their own classroom context by adapting examples and contexts.
- **Offer ongoing professional development on learning strategies and habits instruction.** Use structures like professional learning communities, lesson studies, and coaching, with opportunities for teachers to share practices and learn from one another. Include the research on how strategy use develops, for example that new strategies slow learners down before helping, so teachers don't abandon what's working.

High-Value Learning Activities



High-value learning activities seamlessly integrate learners' interests and curiosities with standards-aligned content and skills in developmentally appropriate ways. Done well, these activities connect not only to learners' interests, but to their goals, life experiences, and prior knowledge, as well as to real opportunities and challenges in their communities and the world beyond school. These activities come in all shapes and sizes. They can be individual or group focused, align to a variety of topics or subject areas, and take place over a range of time periods. What these activities have in common is that they allow learners to explore their interests, co-design learning to increase relevance,[30,91] and build an array of skills that matter to them and support their growth—opportunities that are essential for fostering agency.

What High-Value Learning Activities Looks Like Over Time:

- **In K-2, relevance connects to what's close to home.** Learning connects most powerfully to what young children already know and love, such as their families, their neighborhoods, their immediate interests, and the world they can see and touch.[107] High-value activities start from a child's lived experience and curiosity, then can connect to standards-aligned skills.
- **In 3-5, relevance connects to the community and real-world questions.** As learners grow more curious about how the world works, high-value activities connect to their expanding interests and to real problems and places beyond the classroom.[107] They might investigate something in their neighborhood, learn from community members, or tackle a question that deeply matters to them.
- **In 6-8, relevance connects to identity, purpose, and the wider world.** Young adolescents are working out who they are and what they care about, so the most engaging activities link learning to their identities, values, sense of purpose, and to authentic problems in their communities and the world beyond.[107] This is when authentic audiences, real fields, and real-world impact make learning feel like a worthwhile endeavor.



When teachers take the time to observe and truly understand learners—their curiosities, interests, and needs—they can support motivation, remove barriers, and extend learning in purposeful ways. But this doesn't mean every activity must be tailored to each individual learner, or that only interest-matched activities have value. Often a shared focus builds motivation, capacity, and even new lifelong passions, on topics that weren't originally any learner's primary interest. At their best, shared studies let each learner bring their own interests and strengths while developing new ones.

Dive Deeper

Learn more about implementing High-Value Learning Activities in your context

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How to get started if you are a K-2 teacher:

- **Get to know your learners individually.** Closely observe, survey, and talk with learners individually and as a group to understand their interests, curiosities, needs, and motivators.[108]
- **Incorporate learner interests into learning experiences.** Once you know learners, work their interests into assignments, projects, and groupings where possible.[1,20,46,50]
- **Encourage learners to wonder.** Create routines that surface and document learners' ever-changing interests and questions (e.g., an "I wonder..." wall, quick surveys).
- **Let learners grapple before you teach.** Instruction often follows "I do, we do, you do," but when children already have some prior knowledge, try starting with the "you do." Let them experiment, inquire, and reach their own solutions first; then any modeling you do honors what they already know and targets their real areas of challenge.
- **Use protocols to lift learners' voices and help them co-construct learning.** Protocols are discussion structures that support equity of voice, helping each child feel their ideas matter, and open-ended ones help you understand learners' thinking and passions. (Check out: Protocols Videos from EL Education)
- **Let learners engage with content and show learning through multiple modalities.** Different modalities like art, drama, and writing let learners work through mediums they already value or want to explore. This helps more learners access and show what they know.
- **Design extended projects and studies around learners' worlds, questions, and experiences.** High-interest studies are deeply motivating and build a wide range of skills. Use projects to make meaning across home, school, and community.[109] (Check out: Community as Classroom from Teton Science Schools)

How to get started if you are a 3-5 teacher:

- **Get to know your learners individually.** Closely observe, survey, and talk with learners individually and as a group to understand their interests, curiosities, needs, and motivators.[108]
- **Incorporate learner interests into learning experiences.** Work learners' interests into assignments, projects, and groupings where you can. As interests grow more subject-specific at this age, notice that a learner disengaged in one area may light up in another.[1,58]
- **Design projects around real questions, investigated in the real world.** Build projects where learners investigate questions connected to the people, places, and problems beyond the classroom, bringing in professionals and community partners and sharing work with a real audience.[106,109] (Check out: Community as Classroom from Teton Science Schools)
- **Let learners grapple before you teach.** When learners already have some prior knowledge, let them dig in first by experimenting, inquiring, and reaching their own solutions before you model or explain. Then your instruction can honor what they already know and target their areas of growth.
- **Use protocols to lift learners' voices and help them co-construct learning.** Protocols support equity of voice and help each learner feel their ideas matter. Increasingly, let learners help shape what and how they study, not just respond to what you've planned. (Check out: Protocols Videos from EL Education)
- **Let learners engage with content and show learning through multiple modalities.** Offer real choice in how learners work and demonstrate understanding like art, writing, building, presenting through mediums they value or want to explore. This helps more learners access and show what they know.

How to get started if you are a 6-8 teacher:

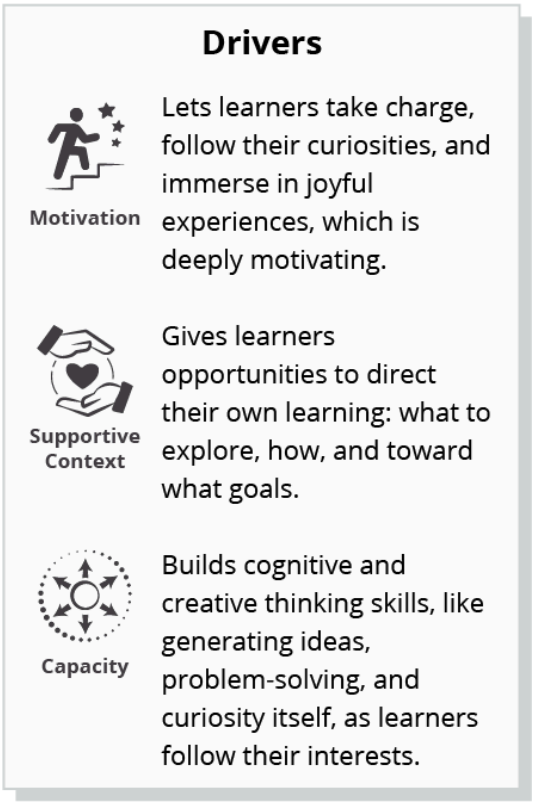
- **Get to know your learners individually.** Observe, survey, and talk with learners to understand their interests, curiosities, needs, and motivators[108] as well as the identities, values, and questions about the future that increasingly drive what they care about.
- **Connect learning to who learners are and want to become.** At an age when young people are working out their identities, tie learning to their values, communities, and emerging sense of purpose. Work that connects to identity is what makes the effort feel worth it. (See: Metacognitive Reflection, Feedback & Self-Knowledge)
- **Design projects around real questions, investigated in the real world.** Co-build projects where learners investigate questions connected to the people, places, and problems beyond the classroom, bringing in professionals and community partners and sharing work with a real audience.[106,109] (Check out: Community as Classroom from Teton Science Schools)

- **Let learners grapple before you teach.** When learners already have some prior knowledge, let them dig in first by experimenting, investigating, reaching their own conclusions before you model or explain, so your instruction targets their areas of growth.
- **Share real authority over what and how learners study.** Move beyond soliciting input toward genuine co-design. Let learners help shape the questions, the work, and how they'll show what they've learned. Young adolescents can tell the difference between real say and token choice.
- **Offer real choice in how learners engage and demonstrate learning.** Let learners work and show understanding through the modes that fit the task and their strengths such as writing, building, performing, designing, presenting to an audience.

How to get started if you are a site or systems leader:

- **Ensure flexibility and spaciousness in curricula.** When the scope and sequence includes a manageable number of objectives and room to customize, teachers can more easily build high-value experiences into daily practice.
- **Give staff access to a wide range of supplementary materials.** Create avenues for teachers to find resources responsive to learners' interests. Otherwise, designing high-value activities from scratch becomes unsustainable. *In the middle grades especially, this increasingly means access to real tools, community partners, and outside experts, not just classroom materials.*
- **Audit how time is used to make room for high-value activities.** Identify parts of the day that could hold high-value experiences, and consider what training, support, and space teachers would need. *This looks different across the grades: interest-driven stations within choice time in the early grades, project time tied to real questions in the upper-elementary grades, and dedicated blocks like studios, electives, or intensives for sustained, interest-based work by middle school.*
- **Give educators agency while keeping coherence across grades.** When teachers shape their own instructional design without fear of failing, they extend agency-rich opportunities to learners. Encourage vertical alignment, so relevance deepens over time.
- **Hire educators who believe in high-value learning activities.** Look for teachers committed to integrating learners' interests with standards, and willing to learn how.
- **Support teachers to plan high-value activities.** Provide training and protected time for planning purposeful activities grounded in standards and learners' interests.

Exploration and Play



Play is a context where learners can enact their agency by actively defining and pursuing their interests and goals in joyful, meaningful, and engaging ways. Play exists across a spectrum—ranging from the most agentic play, which is initiated entirely from within the learner, to the least agentic play, which is controlled by external rules, such as a teacher-assigned activity with a set topic and steps—and asks learners to take on different roles and responsibilities.[110,111] When learners play, they have the opportunity to lead their learning based on their interests and motivations; develop and apply a wide range of skills as they make sense of the world around them; and experience a natural context for agency.[110,112]

The impulse behind play is to follow one's curiosity and pursue one's interests. That doesn't fade as learners grow; its expression matures. Over time it grows to include self-directed exploration: choosing a question worth investigating, pursuing a passion, diving deep into a topic of one's own choosing. But play doesn't disappear. It becomes more sophisticated, like playing with materials to playing with ideas, and even older learners do their best thinking when they can tinker and follow a "what if." Across the grades, play and exploration are how learners exercise agency in service of their own curiosity.

What Exploration and Play Looks Like Over Time:

- **In K-2, play is how children explore.** Young children make sense of the world through imaginative and open-ended play. They try on roles, test ideas, and follow their interests,[111] which is their first practice choosing their own path and pursuing it.
- **In 3-5, play grows into interest-based investigation.** As learners become more capable of sustained, logical inquiry,[61,66] following their curiosity means investigating a question, building something over time, or diving into a topic that fascinates them. This is often done alongside peers, whose interests now influence their own.
- **In 6-8, exploration becomes deep and self-directed.** Young adolescents can pursue a genuine interest with real independence:[81] choosing a question, immersing themselves in a field, and connecting it to who they are becoming. Exploration becomes a way to try on

possible identities and futures in addition to topics.

Dive Deeper

Learn more about supporting Exploration and Play in your context

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How to get started if you are a K-2 teacher:

- **Learn about the value of play and different types of play.** Learn about the different types of play and strong play-based practices to identify what fits your context and learning objectives. (Check out: The Power of Playful Learning from NAEYC; How We Play from the National Institute for Play; Pedagogy of Play from Project Zero)
- **Design play to meet learners' interests and motivations.** Observe and ask learners about their evolving interests and goals, then use these to design play experiences.[110,113]
- **Design welcoming play spaces.** Ensure play spaces and materials (e.g., books, images, toys, artifacts) represent the varied identities of your learners.[110] Encourage home languages during play, and make furniture and materials movable, child-sized, accessible, and suited to both solitary and collaborative play.
- **Incorporate materials that spark curiosity and invite new ideas.** Introduce open-ended materials like ordinary objects, art supplies, recycled materials, nature, loose parts, musical instruments that invite learners to author their own stories, express themselves, experiment, and make meaning.[110,114]
- **Ensure play experiences have opportunities for choice.** Design open-ended play that lets children make decisions about activities, materials, and outcomes).[110] Choice makes play more valuable to children and fuels their motivation to engage.
- **Use play to meet learning standards.** Research shows choice, play, and agency can be avenues toward meeting standards.[114,115,116] Intentionally plan play that helps children practice language, literacy, math, science, social studies, and social-emotional skills. Observe closely, choosing when to join in to ask questions, scaffold, and teach in the moment.
- **Observe, document, and reflect on play.** Watch how children learn and what skills they show during play. Ask yourself, "*How are children revealing their thinking and feelings*?",[110] and use what you notice to adjust play structures.
- **Observe and respond to unfair or exclusionary behavior during play.** Children often reflect what they see in the world through play, including stereotyping or unfair treatment. Stay attentive and use thoughtful strategies like narrating what's happening ("verbal mapping") to gently guide children toward more respectful interactions.[116] (Check out: Leading

by Following: An Introduction to Verbal Mapping as "Naming" Abstract, Affective Realia by Dr. Tim Kinard and Dr. Jesse Gainer)

- **Encourage learners to reflect on play.** Name what you see: "*You stacked the rectangular block on top of the square block.*" This builds self-awareness. Ask open-ended questions to understand their thinking[113]: "*How did you decide to stack the blocks that way*?" or "*Why do you think the leaves float but the rocks sink*?"

How to get started if you are a 3-5 teacher:

- **Design experiences around learners' interests and questions.** Observe and ask learners what they're curious about, and use it to shape both playful and investigative experiences.[110,113] Interest powers real engagement at this age—the more genuinely a task connects to what a learner cares about, the harder they'll work at it.
- **Keep making room for play.** Learners in these grades still learn through play: games, creative and imaginative play, and hands-on building and tinkering. Protect it rather than assuming they've outgrown it, and use it to practice academic and social skills. (Check out: Pedagogy of Play from Project Zero)
- **Offer real choice about what to explore.** Give learners genuine say over the questions they pursue and how. That might mean an interest survey, a menu of options, or simply an open invitation to chase a question that grabs them. Choice gives them ownership over exploration.
- **Support sustained inquiry, not just one-off activities.** Following a curiosity deeply takes time. Give learners the chance to stay with a question across days or weeks, and to build something real rather than sampling a topic and moving on. (See: Deep, Self-Directed Work)
- **Provide open-ended materials, tools, and resources.** Offer resources that invite investigation, like art and building materials, real tools, texts, and the freedom to seek out what they need. This enables learners to author their own work, experiment, and make meaning.[110,114]
- **Let learners explore together.** Peers' interests now shape one another's, so create interest-based groups and collaborative investigations where learners pursue shared questions—sometimes across ages, so learners can teach and learn from one another.
- **Have learners reflect on their exploration.** Ask open-ended questions that help learners make their thinking visible: "*What surprised you*?" and, "*What would you try next*?" Increasingly let them lead that reflection rather than only responding to your prompts. (See: Metacognitive Reflection, Feedback & Self-Knowledge)

How to get started if you are a 6-8 teacher:

- **Design learning around learners' genuine questions and interests.** Ask what young adolescents actually wonder about and care about, and build investigations from it. The more that questions truly come from learners, the more they'll invest in pursuing it.
- **Make room for playful experimentation.** Give young adolescents room to tinker, test "what if," take creative risks, and approach serious questions with a spirit of experimentation. Some of the best thinking at this age happens when learners feel free to try things out without fear of getting it wrong. (Check out: Pedagogy of Play from Project Zero)
- **Let learners choose what to explore, and how deep to go.** Give learners a voice in topics, questions, and approaches through menus of investigations, self-designed inquiry, or open invitations to pursue a passion.
- **Connect exploration to the real world and real fields.** Bring in professionals and community members, get learners out of the building, and connect their inquiry to authentic problems and roles. At this age, young adolescents are working out who they are, so exploring what a field or role is actually like is how they discover potential future paths. (See: High-Value Learning Activities)
- **Let exploration cross subject lines.** Real-world questions are rarely siloed in one subject, so invite learners to pursue investigations that pull together science, history, art, math, and more. (See: High-Value Learning Activities)
- **Let learners explore together and lead their own inquiry.** Create interest-based groups where learners pursue shared questions, and increasingly hand over facilitation. Young adolescents can propose topics, lead discussions, and steer their own exploration.
- **Have learners reflect on and share what they've explored.** Build in reflection on what they found and how they thought, and give exploration an authentic audience. Sharing findings raises the stakes and helps young adolescents feel pride. (See: Metacognitive Reflection, Feedback & Self-Knowledge)

How to get started if you are a site or systems leader:

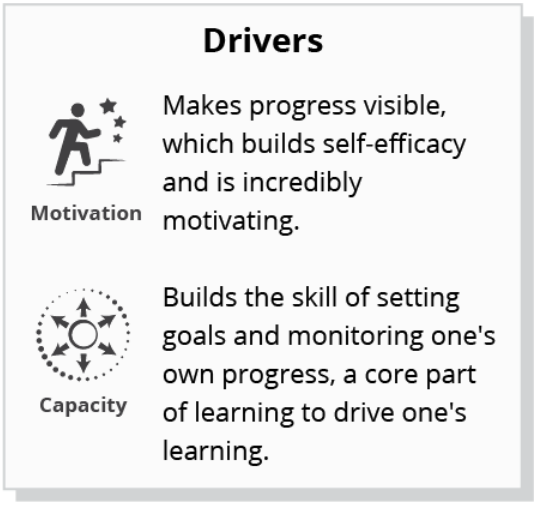
- **Educate yourself and other administrators on the value of play and exploration.** Learn how interest-driven play and inquiry support learning and development, and how to support high-quality experiences across a site or system. *What this looks like shifts across the grades, from play as the primary vehicle in the early grades, to interest-based inquiry in grades 3-5, to self-directed exploration that supports motivation and identity development by middle school.* (Check out: Pedagogy of Play from Project Zero)
- **Build teachers' capacity to facilitate play and exploration.** Facilitating play and

interest-based inquiry takes real skill.[117] Provide professional development on designing around learners' interests, guiding investigation without taking it over, and knowing when to step in and when to step back. *In the early grades this includes how to join in and support play; by the middle grades it centers on releasing control to learners.*

- **Address barriers to play and exploration in daily practice.** Teachers face real challenges: curricular and policy mandates, time pressures, understaffing, lack of training, and parental pressures.[117] Understand the barriers at your site and work with teachers and families to address them.
- **Protect time for play and exploration in the master schedule.** Schedule longer, uninterrupted blocks rather than treating this as an extra, and build playful, exploratory learning into content blocks. *Sustained inquiry needs increasingly protected time as learners grow.*
- **Offer interest-based, multi-age opportunities for exploration.** Structures like interest-based groups or exploration cycles let learners pursue passions beyond the standard curriculum, and mixing ages lets older learners share their knowledge and creativity with younger peers.
- **Build dedicated structures for interest-based exploration.** *In the middle grades especially, create space for exploration cycles, intensives, electives, or intersession-style courses where learners choose from a menu of investigations and pursue them over sustained time.* (See: Deep, Self-Directed Work)
- **Open the school to the world.** *Particularly as learners get older, partner with professionals, community organizations, and local businesses so learners can explore real fields through externships, expert-led courses, and problems that extend beyond school walls.* (Check out: Building & Growing Community Partnerships from CAPS Network)
- **Let learners help create the offerings.** *By the middle grades, young adolescents can propose and even lead explorations. For example, you might offer pathways for learners to start an interest group, design a course, or bring in a passion the school doesn't yet offer.*
- **Provide adults with opportunities to play and explore.** Curiosity isn't just for learners. Give teachers chances to play, tinker, and follow their own interests. It keeps them creative, engaged, and modeling what exploration looks like, and can "keep our brains flexible, ward off depression, sustain optimism, and sharpen our social-emotional skills".[118]

Focus on Goals, Progress & Mastery

A focus on goals, progress, and mastery makes young people's learning and the process that got them there visible. In agentic settings, grades, levels, and scores take a back seat to the *learning process* that learners took to achieve their goals and reach mastery. When learners see their progress toward mastery and are recognized for their hard work, they come to see themselves as capable, which builds their self-efficacy and fuels motivation.[45,119] Over time, learning to set goals and monitor their own progress becomes a capacity itself, and part of how they drive their own learning.



What a Focus on Goals, Progress & Mastery Looks Like Over Time:

- **In K-2, goals are small, concrete, and mostly adult-guided.** Children can set and pursue a near-term goal like finishing a puzzle or learning to write their name, and see their progress when it's made visible for them.[46] At this age, tracking progress and recognizing hard work are largely led by adults, with children increasingly reflecting on how they're doing.
- **In 3-5, learners take on more of the goal-setting themselves.** As metacognition develops, learners can genuinely judge their own progress, set goals that stretch across days or weeks, and begin owning the tracking.[66] Time horizons are still developing, so goals work best kept concrete and near-term, growing longer as they age through the band.
- **In 6-8, goals can reach further but need structure to hold.** Abstract reasoning makes long-range goals possible for the first time, connected to who learners are becoming.[78] But self-regulation lags behind ambition, so long-horizon goals need interim milestones and regular check-ins. Recognition shifts too: public praise that motivates a child can embarrass a young adolescent, so progress is best kept personal.

Dive Deeper

Learn more about implementing a Focus on Goals, Progress & Mastery in your context

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How to get started if you are a K-2 teacher:

- **Affirm why goals exist and how they help.** Whether goals are brand new to a learner or something they've done for years, affirm the deeper purpose behind goals like how they build skills for life and how they keep the emphasis on progress, not just the score at the end.
- **Develop systems for learners to share their goals.** Sharing a goal with an accountability partner increases the likelihood of success.[120] This could look like sharing daily short-term goals with a peer, or long-term goals with a caregiver at a conference. (Check out: Accountability Partners from FullScale)
- **Create a system to manage learners' goals, progress, and achievements.** For young learners, teachers will manage these systems but learners and families should always be able to see their goals and progress (e.g., goal trackers in an accessible space, a portal, a portfolio of best work). (Check out: How Data Notebooks Can Support Goal-Setting from FullScale)
- **Name and explicitly teach goals.** Communicate academic and habit goals, teaching one aspect at a time. Differentiate long-term from short-term goals, providing concrete steps and small wins on the way to larger ones like writing a paragraph or mastering counting by twos. (Check out: Using Learning Targets with Early Primary Children from EL Education)
- **Regularly review goal trackers with learners, without judgment.** Ask questions that prompt learners to reflect on their progress and strategies, get curious about what helped or hindered them, and identify next steps (See: Metacognitive Reflection, Feedback & Self-Knowledge). Use the time to celebrate milestones, hard work, and how they overcame challenges through weekly or biweekly 1:1 or small-group conferences and daily goal reflection as a class.
- **Celebrate and display learners' progress and mastery.** Honor progress regularly through daily and weekly routines (e.g., shout-outs, storytelling) and longer-term structures (e.g., exhibitions, learner-led conferences). Ask learners beforehand which ways feel meaningful, and build rituals they look forward to.
- **Minimize the use of external rewards.** Prizes or points for reaching a goal don't tend to promote real engagement and can reduce intrinsic motivation,[121,122] creating a culture of competition.

How to get started if you are a 3-5 teacher:

- **Affirm why goals exist and how they help.** Whether goals are brand new to a learner or something they've done for years, affirm the deeper purpose like how goals build skills for life, and how they keep the emphasis on progress, not just the score at the end.
- **Hand over more of the goal-setting.** As learners become able to judge their own progress, involve them in setting their own goals. Start with structured choices and build toward learners drafting goals themselves.
- **Keep goals concrete and near-term, stretching gradually.** Learners this age can hold goals across days and weeks, but their sense of time is still developing so goals work best broken into concrete steps with visible small wins, growing longer across the band.
- **Develop systems for learners to share their goals.** This makes learners more likely to follow through.[120] Learners can share goals with a peer partner and check in on each other, or share longer-term goals with families at conferences. (Check out: Accountability Partners from FullScale)
- **Have learners own more of the tracking.** Move from teacher-managed systems toward learners recording and monitoring their own progress (e.g., goal trackers, data notebooks, portfolios learners maintain themselves) while keeping goals and progress visible to families. (Check out: How Data Notebooks Can Support Goal-Setting from FullScale)
- **Review progress together, and let learners lead the reflection.** In regular check-ins, ask questions that prompt learners to reflect on their progress and strategies, get curious about what helped or hindered them, and identify next steps. Increasingly have learners come prepared to lead. (See: Metacognitive Reflection, Feedback & Self-Knowledge)
- **Celebrate progress and mastery and keep it personal.** Honor growth through routines and longer-term structures like learner-led conferences and exhibitions. As learners grow more aware of how they compare to peers, focus recognition on personal growth rather than ranking, and ask learners which forms of celebration feel meaningful.
- **Minimize external rewards.** Prizes or points for reaching a goal don't tend to promote real engagement and can reduce intrinsic motivation,[122] creating a culture of competition.

How to get started if you are a 6-8 teacher:

- **Affirm why goals exist and how they help.** Whether goals are brand new to a learner or something they've done for years, affirm the deeper purpose like how goals build skills for life, and how they keep the emphasis on progress, not just the score at the end.
- **Let learners set their own goals and connect them to what they care about.** Young adolescents can set genuine goals for themselves; help them link those goals to their

interests, values, and who they're becoming, which is what makes a goal worth pursuing at this age.

- **Support long-range goals with real structure.** Learners can now hold goals that reach weeks or months out, but self-regulation lags behind ambition so break long goals into interim milestones with regular check-ins.
- **Develop systems for learners to share their goals.** Sharing a goal with someone else makes learners more likely to follow through.[120] By this age learners can run much of this themselves: pairing with a peer accountability partner to set goals and check in on each other's progress, sharing goals within an advisory or small group, and presenting their own goals and progress to families at student-led conferences.
- **Have learners own their goals and track their own progress.** By now learners can run their own goal systems (e.g., trackers, portfolios, data dashboards) with you coaching rather than managing. Keep progress visible to families through learner-led structures. (Check out: Students Own Their Progress from EL Education)
- **Review progress in conferences learners lead.** Have learners come prepared to report on their own progress, name what helped or hindered them, and set next steps. (See: Metacognitive Reflection, Feedback & Self-Knowledge)
- **Keep recognition personal and never rank publicly.** Honor growth and mastery, but recognize effort in ways that don't expose or compare learners. Public praise that motivates a younger child can embarrass a young adolescent, and visible rankings can harm both motivation and safety. Ask learners how they want to be recognized. (See: Safe & Trusting Culture)
- **Minimize external rewards.** Prizes or points for reaching a goal don't tend to promote real engagement and can reduce intrinsic motivation.[122] At an age when intrinsic motivation is already declining, external rewards work directly against what you're trying to build.

How to get started if you are a site or systems leader:

- **Develop metrics and systems to understand progress toward fostering agency.** Set goals, collect data, and measure agency development based on the experiences and outcomes of young people, families, educators, and community members or partners.
- **Create systems to manage and share learners' goal progress and attainment.** These can be online platforms (e.g., a learning management system) or lower-tech ones (e.g., spreadsheets, paper trackers); what matters is making progress visible to learners, teachers, and families. Consider structures like learner-led conferences and celebrations of learning that share work with families and the community. *As learners grow more able to own their*

goals, prioritize systems they can navigate and update themselves. By the middle grades, this means learner-led conferences where learners are fully in charge of reporting their own progress. (Check out: The Who, What, and Why of Student-Led Conferences from EL Education)

- **Examine how grades, ranking, and recognition shape motivation.** *This matters most in the middle grades, where public comparison intensifies, like honor rolls, class ranks, awards that celebrate the same few.* Examine schoolwide practices that rank learners publicly, and build recognition systems that keep the emphasis on growth and mastery. (See: Safe & Trusting Culture)
- **Model goal orientation by celebrating staff learning and progress in warm, authentic ways.** Create regular monthly time for all staff—including leaders—to set, monitor, reflect and celebrate their goals. Keep the emphasis on learning and growth (rather than who turned in lesson plans on time) which creates a culture of joyful celebration.
- **Establish common practices and expectations for external rewards.** Ensure teachers, staff, and families share a vision for when and whether external rewards are used, and make those decisions strategically and intentionally.

Metacognitive Reflection, Feedback, and Self-Knowledge



Metacognitive reflection and high-quality feedback help learners engage in the self-evaluation needed to reach their goals, now and in the future. Over time, they also build genuine self-knowledge: a growing understanding of how they learn, what they're capable of, and who they are. Reflection and feedback can take many forms and range in frequency and depth. What these processes have in common is that they carve out avenues for learners to gather new insights from their own reflection and the feedback of others, which they can then use to set meaningful goals and plan tangible actions toward them. As learners reflect and take in feedback again and again, those insights accumulate into a durable sense of themselves as learners—their strengths, their strategies, their interests, and their growing edges. Metacognitive ability, nurtured through feedback, practice, and instruction, equips young people to set goals, plan, and assess. Self-reflection, along with giving and receiving feedback, both requires a supportive context and helps create one, helping learners feel seen, valued, and heard.

What Metacognitive Reflection, Feedback & Self-Knowledge Looks Like Over Time:

- **In K-2, reflection happens in the moment, with adults thinking alongside.** Young children can engage in reflection in its earliest form by noticing what they did and what happened. However, they need an adult to prompt and narrate it.[51] Feedback lands best when it's immediate and specific. All of this supports children who are just beginning to understand themselves as learners.

- **In 3-5, learners become able to reflect on their own.** With the support of now-present metacognition, learners can judge how their learning is going, notice what's hard, and consider what to try next. This makes learner-led reflection possible for the first time.[66] Feedback can start pointing at strategies rather than just outcomes. Learners see themselves more clearly as learners, including what they're good at and what they find hard.

- **In 6-8, reflection deepens and self-knowledge turns toward identity.** By this age, it's not just whether young adolescents reflect that matters, but how well they do it. Reflecting skillfully means evaluating which strategies worked and why, not just recalling what happened, which starts to affect how much they learn.[84] As young people actively work out

who they are, self-knowledge extends beyond "how I learn" to "what I value, what I care about, and who I want to become."

Dive Deeper

Learn more about supporting Metacognitive Reflection, Feedback, and Self-Knowledge in your context

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How to get started if you are a K-2 teacher:

- **Model metacognitive reflection and how to give high-quality feedback.** Model reflecting on your goals, work, strategies, pivots; asking others for feedback; and sharing both positive and constructive feedback.
- **Narrate learners' actions to build their inner voice.** Encourage learners to think aloud with you, with a partner, or quietly to themselves.
- **Provide process-oriented feedback on children's learning and growth.** Give feedback during or soon after a task, and be as concrete as possible, connecting what children did to the strategies that made it work. For example: "*You drew individual tally marks for each color so you could count them easily. Working carefully helped you stay accurate*." (See: Learning Strategies & Habits Instruction)
- **Encourage self-reflection and metacognitive thinking.** Ask learners what strategies worked or didn't and why, and what they'd try differently next time—either in conferences or as a class. Class reflections can go on anchor charts for future reference ("*What strategies are you using? Did that strategy work? Why?"*). (Check out: Metacognition in a Modern Classroom from Modern Classrooms)
- **Use 1-1 and small-group conferencing to encourage reflection and offer feedback.** Conferences are a good time to build metacognitive skills through questioning, help learners decide what to revise, review self-evaluation rubrics, offer feedback on specific skills, and reflect on goal progress. (See: Focus on Goals, Progress & Mastery)
- **Help learners identify challenges they face in exercising their agency.** Help them spot gaps in the skills, mindsets, or self-knowledge that underpin agency.[108]
- **Scaffold self-reflection and peer feedback.** Build routines that help learners reflect, give feedback, and take in feedback from others. Things like simple self-evaluation rubrics, buddy check-ins, class-made criteria from models of strong work, critique protocols, and sentence stems for giving feedback. (Check out: Peer Critique from EL Education; Creating a Culture of Critique from Project Zero)
- **Provide space and time to reflect and give and receive feedback.** Design specific moments in the day for all learners to reflect, self-evaluate their work, and give and receive

feedback.

- **Invite feedback from learners and families.** Ask learners and families for constructive feedback on the school and classroom, and use it to better meet everyone's needs.

How to get started if you are a 3-5 teacher:

- **Model metacognitive reflection and how to give high-quality feedback.** Model reflecting on your goals, work, strategies, pivots; asking others for feedback; and sharing both positive and constructive feedback.
- **Hand over the reflection to learners.** Now that learners can genuinely reflect on their own, shift from narrating thinking for them to prompting them to do it themselves: what they tried, what worked or didn't, what they'd change. (Check out: Metacognition in a Modern Classroom from Modern Classrooms)
- **Give feedback on strategies, not just outcomes.** Keep feedback process-oriented and concrete, and increasingly aim it at the *how* (the approach a learner took) so they can carry the strategy to the next task. For example: "*You tried two ways to organize this before choosing one. That planning is what made it clear.*"
- **Help learners build a picture of themselves as learners.** Use reflection and feedback to help learners notice patterns over time: what they're good at, what they find hard, which strategies work for them. This growing self-knowledge is what lets learners set goals that actually fit them. (See: Focus on Goals, Progress & Mastery)
- **Use conferencing to deepen reflection and offer feedback.** Conferences are a good time to build metacognitive skills through questioning, help learners decide what to revise, review self-evaluation rubrics, and reflect on progress. Increasingly, have learners come prepared to lead.
- **Help learners identify challenges they face in exercising their agency.** Help them spot gaps in the skills, mindsets, or self-knowledge that underpin agency.[108]
- **Scaffold real peer feedback and protect time for it.** Build routines that help learners give and take in feedback from one another: self-evaluation rubrics, class-made criteria from models of strong work, critique protocols, and sentence stems. Peers can offer genuinely useful feedback at this age, so make room for it as a regular part of the work. (Check out: Peer Critique from EL Education; Creating a Culture of Critique from Project Zero)
- **Invite feedback from learners and families.** Ask learners and families for constructive feedback on the classroom, and use it to better meet everyone's needs.

How to get started if you are a 6-8 teacher:

- **Model metacognitive reflection and how to give high-quality feedback.** Model reflecting on your own goals, work, strategies, pivots; asking for feedback; and giving both affirming and constructive feedback well.
- **Push for skillful reflection.** Learners can now reflect on their own, so raise the bar: move from "*what did I do*?" toward evaluating which strategies worked and why, and what they'll do differently next time. How well learners reflect now affects how much they learn. (Check out: Group Reflection from Project Zero; 40 Reflection Questions from Edutopia)
- **Give feedback aimed at the thinking behind the work.** Keep feedback process-oriented and specific, targeting the strategies and reasoning a learner used so they can transfer them. Increasingly position learners to seek out and act on feedback themselves.
- **Help learners build self-knowledge that reaches toward who they are.** Use reflection and feedback to help learners understand not just how they learn, but what they value and what they want to work toward. At an age when young people are actively working out who they are, this self-knowledge is what lets them set goals that are meaningful to them. (See: Focus on Goals, Progress & Mastery)
- **Have learners lead their own reflection in conferences.** Learners come prepared to assess their own progress, name what helped or hindered them, and set next steps.
- **Make peer feedback rigorous and safe.** Young adolescents can give sophisticated feedback, but speaking up and being critiqued carry social weight now. Use protocols, criteria, and sentence stems that keep feedback substantive and specific, and build the trust that makes critique feel safe rather than risky. (Check out: Praise, Question, Suggestion from EL Education)
- **Invite feedback from learners and families and act on it visibly.** Ask learners and families for honest feedback on the classroom, and show what changed because of it, so learners see their voice carries real weight.

How to get started if you are a site or systems leader:

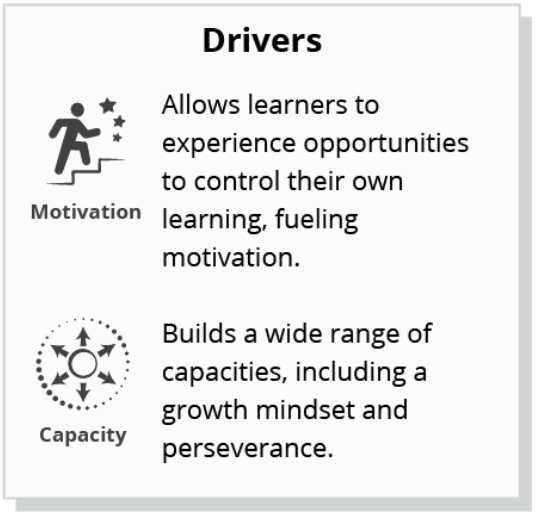
- **Take a cross-curricular approach to developing metacognition.** A review of 50+ studies found that metacognition can be taught and should be systematically integrated across the curriculum.[123] Identify ways to develop learners' metacognition across your school or system, and create tools teachers can use, like a guide of effective questions to use before, during, and after learning (*"What should I try first?", "What helped me finish this?"*). (Check out: Empowering Young People with Questions from The Forest School)
- **Offer ongoing professional development on supporting metacognitive reflection.** Use

structures like professional learning communities and coaching to help teachers model, narrate, and support reflection and the giving and receiving of feedback, with opportunities to learn from one another.

- **Model metacognitive reflection.** Practice it with staff. For example, describe how you're working toward your own goals, and ask staff for feedback on your reflections along the way.
- **Create ways for staff to experience high-quality feedback.** Examine your own and your coaches' feedback practices to ensure you're modeling how to give it well, using structures like descriptive praise or 2x2s that make feedback actionable. Build in chances for staff to practice giving feedback to each other.
- **Help teachers identify work worth peer feedback.** Give teachers chances to share and discuss which work they're having learners critique, and how they're scaffolding learners for success.
- **Hire educators skilled at giving high-quality feedback.** Look for teachers whose feedback focuses on the learning process and offers actionable suggestions for improvement.

Deep, Self-Directed Work

When engaging in deep, self-directed work, learners build perseverance and do the "heavy lifting" for their own learning. These learning experiences are purposefully designed by educators and offer tasks that are optimally challenging, stretching learners just beyond their current level of mastery.[50] While time for self-directed work can vary in length and frequency, all such work requires that learners shoulder the responsibility for learning in ways that are developmentally appropriate. Here, learners have the opportunity to control and make decisions for their learning, fueling motivation,[28,29,30] as well as practice getting into a flow state, while simultaneously building a wide range of capacities.



What Deep, Self-Directed Work Looks Like Over Time:

- **In K-2, self-directed work leans on structure and a prepared environment.** Young children can take real ownership of their work when the environment is set up to support it, with clear options, established routines, and materials designed for independent use.[46] This enables children to make choices, persevere, and drive their own learning for variable stretches of time.
- **In 3-5, learners sustain and manage more of the work themselves.** As learners can plan, monitor their progress, and stick with a goal, they can work independently for longer and take on more of managing the process such as checking their own progress, deciding what's next, and adjusting.[66] Educators still design much of the work, but learners increasingly help shape how they'll do it.
- **In 6-8, work becomes extended and genuinely learner-driven.** Young adolescents can carry substantial work over sustained time and take real ownership—not just of doing the work, but also designing it: setting the goal, planning the path, and driving it forward, with adults supporting follow-through where self-regulation still lags.[81]



Supporting learners' motivation and agency through more choice and autonomy does not mean "kids run the show." The adult's role shifts to coach or guide, helping learners make good decisions for themselves and stepping in with support when needed.[2,23,124] That role is active, not absent: adults set learners up for success by calibrating how much autonomy the work calls for, keeping the work appropriately challenging, and making sure learners have the resources they need.

Dive Deeper

Learn more about supporting Deep, Self-Directed Work in your context

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How to get started if you are a K-2 teacher:

- **Integrate extended blocks of uninterrupted work time.** Modify current systems like traditional station rotations so learners select and practice an array of skills. These blocks typically run 30 to 60 minutes, and in some cases up to 3 hours (e.g., Montessori work periods). Use the time for personally challenging tasks of learners' choosing, within their zone of proximal development. Sustained time enables learners to get deep enough into work to drive it themselves.
- **Give the work a concrete form learners can drive themselves.** Self-directed work needs a container young children can navigate on their own, like a set of self-paced stations, a simple choice board, a hands-on project, or a "must-do and may-do" list. When the path is visible and the materials are within reach, children can get themselves started, keep going, and know what to do next without turning to you at every step. (Check out: Math Playlist from Trailblazer Elementary School)
- **Plan optimally challenging activities for self-directed time.** Use data from standards-aligned assessments to create purposeful practice opportunities.
- **Help learners build stamina.** Persisting through challenge takes practice. Build learners' stamina and comfort with "not knowing yet" by gradually increasing self-directed time, starting short and offering micro-challenges along the way.
- **Design work where learners do the cognitive lifting.** Structure tasks so learners generate the ideas, work through the problems, and reach their own solutions rather than following your lead. Set up the conditions and let them dig in first, stepping in with a question or a nudge rather than the answer.
- **Design open-ended activities around inquiry questions.** Give learners room to use

creativity and problem-solving by building lessons around a challenge: "*How many squares can you find in our classroom?*" or "*How can you make this lightbulb light?*" Open-ended projects with no single right answer is another good idea, like small groups answering, "*What does a school of the future look like?*" and building a diorama.

How to get started if you are a 3-5 teacher:

- **Build longer blocks of uninterrupted work time into the day.** Give learners extended stretches to work through tasks at their own pace. Learners this age can sustain focus longer, and protecting that time lets them get deep enough into work to drive it themselves.
- **Give the work a form learners can run themselves.** Self-directed work depends on a structure learners can navigate independently, like a playlist of activities, a multi-step project with clear checkpoints, or a self-paced progression of tasks. When the path is clear, learners can see where they're headed, work without waiting for you, and pick up where they left off. (Check out: Choice Menu from Trailblazer Elementary)
- **Plan optimally challenging work.** Use assessment data to set work at the right level of stretch: challenging enough to require real effort, achievable enough that learners can succeed on their own.
- **Hand over more of managing the work.** As learners can plan and monitor their own progress, shift from managing the work for them to letting them track it themselves. They can decide what's next, check their progress, and adjust as they go.
- **Help learners build stamina.** Persisting through challenge takes practice. Keep extending self-directed time and let learners sit with harder problems, building their stamina and comfort with "not knowing yet."
- **Design work where learners do the cognitive lifting.** Structure tasks so learners generate the ideas, work through the problems, and reach their own solutions rather than following your lead. Set up the conditions and let them dig in first, coaching with questions rather than stepping in with answers.
- **Design open-ended activities around inquiry questions.** Give learners room to use creativity and problem-solving by building lessons around a challenge: "*What patterns can you find in the multiplication table?*" or "*How could you measure the height of a tree you can't climb?*" Open-ended projects with no single right answer work well too, like small groups answering, "*What would make our neighborhood better*?" and presenting a proposal.

How to get started if you are a 6-8 teacher:

- **Protect substantial blocks of uninterrupted work time.** Give learners extended stretches

to drive projects or tasks over sustained periods, and even across multiple sessions. Learners need long enough blocks to get past the surface and into real work

- **Give learners real work to drive.** Self-directed work at this age means lengthy projects and self-paced progressions toward mastery. The more the work is real and the destination is clear, the more there is for a learner to actually take charge of.
- **Plan optimally challenging work.** Set work at the right level of stretch: hard enough to require real effort, but achievable enough that learners can succeed through their own persistence. This is how self-efficacy is built.
- **Hand over the design of the work.** Young adolescents can own more than the execution. Let them set the goal, plan the path, and decide how they'll get there, with you as a coach. Owning the design is motivating because everything about the endeavor is genuinely theirs.
- **Support follow-through where self-regulation lags.** Learners this age can plan ambitious work but still struggle to sustain it, so build in interim check-ins, milestones, and structures that help them stay on track, so longer efforts don't stall. (Check out: Provide Learners With Tools to Prioritize Their Time from Learner-Centered Collaborative)
- **Help learners build stamina for sustained, difficult work.** Keep extending the length and difficulty of self-directed work, building learners' capacity to stay with hard problems over time.
- **Design open-ended work where learners do the cognitive lifting.** Build tasks and questions with no single right answer, so learners generate ideas, wrestle with real problems, and reach their own conclusions rather than following your lead.

How to get started if you are a site or systems leader:

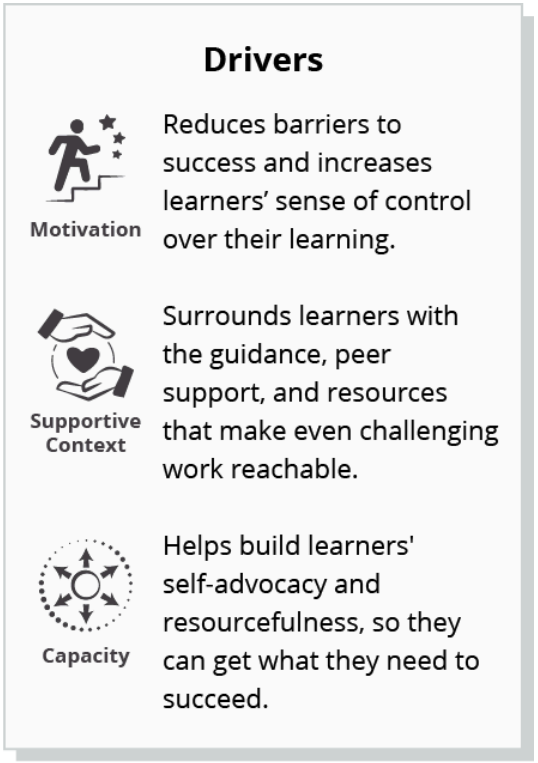
- **Build a schedule that allows extended blocks of work time.** Protect unrushed time for learners to test strategies, iterate, persevere, and get into a flow state. How long and how often these blocks run will depend on your learners, your goals for the time, and your logistics.
- **Invest in the tools and materials that make self-paced work possible.** Playlists, project libraries, self-paced curricula, and (where useful) adaptive digital platforms that let learners work at their own pace and see their own path are essential for self-directed work.
- **Train teachers to support deep, self-directed work.** Teachers need to learn how to recognize when a learner is productively stuck versus genuinely lost, design open-ended and inquiry-based tasks, and use data so that practice time is intentional and appropriately challenging.
- **Develop instructional materials that support questioning and discussion.** Provide

teachers with resources that prompt deep thinking like strong questions, rich content worth wrestling with, and discussion structures so the burden of designing for depth doesn't fall on each teacher alone.

- **Revise the curricular scope and sequence to make room for deep, challenging work.** Build in deliberate practice, uninterrupted work time, and open-ended tasks so then don't get deprioritized.
- **Hire teachers who design work that requires real heavy lifting.** Look for teachers strong at planning standards-aligned activities that make learners persevere, grapple, and do the thinking themselves. (Check out: Reimagining Educator Competencies: Empowering Learner Agency in the Age of AI from the Self-Directed Learning Institute)
- **Support teachers to plan this work.** Provide protected time for staff to design purposeful activities that require learners to persevere.

Targeted Support

Targeted support provides avenues through which learners can identify their need for help, self-advocate, and receive additional support. Support can take many forms, including materials that help learners seek support, mentorship opportunities, and 1:1 and small-group conferencing. Increasingly, it also includes support learners can access themselves—seeking out the help they need when they recognize they're stuck, rather than always waiting for an adult to notice. New tools, including AI-based tutoring, are expanding what this self-accessed support can look like. What these supports have in common is that they help ensure learners can access the support they need to drive their learning; build the support-seeking skills that underpin agency and, in turn, the will to take action and persevere; and keep support available as learners tackle challenging work.



What Targeted Support Looks Like Over Time:

- **In K-2, children learn that asking for help is part of learning.** Young children begin to recognize when they're stuck and turn to a trusted source like a teacher, a peer, or a designated spot in the room for help.[46] At this age, adults do most of the noticing, and the goal is building children's comfort with seeking help rather than giving up or hiding confusion.
- **In 3-5, learners get more specific about what help they need.** As learners can better judge their own understanding,[66] they can name *what* they're stuck on and seek the right kind of help from a teacher, a peer, or increasingly a tool or resource they can use on their own.
- **In 6-8, self-advocacy and self-directed support come into their own.** Young adolescents can navigate real options[81]—choosing the kind of support that fits, from conferencing to peer tutoring to mentorship to self-accessed tools—and advocate for what they need. This is also when peers and mentors become especially powerful sources of support, and when learning to seek help well becomes a genuine life skill.

Dive Deeper

Learn more about implementing Targeted Support in your context

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How to get started if you are a K-2 teacher:

- **Set up 1-1 and small-group conferences.** Use this time with learners to set goals, plan next steps, track progress, reflect, practice a skill, get feedback, or share strategies. (Check out: Conferencing as an Assessment from Learner-Centered Collaborative)
- **Prioritize routines that build belonging and a "safe-to-fail" culture.** Trust and strong relationships let learners take tolerable risks and seek help without judgment, which teaches them that trying and struggling is part of learning. (See: Safe & Trusting Culture)
- **Help children notice when something is hard for them and recognize that's a signal to ask for help.** With young learners this is very guided ("*You've tried three times and it's still tricky, that's a good time to ask for help*"), building a sense that noticing a struggle means to reach for support.
- **Establish consistent systems for learners to access tailored support.** Create structures that let children decide when and how they get support, which builds their stamina and helps you know when to check in and when to let a child keep working.
- **Explicitly teach problem-solving and self-help strategies.** Introduce scaffolds that help learners solve problems on their own, like visual prompts for sharing or taking turns, and sentence stems for asking for help. Model and role-play them until learners are comfortable. (Check out: Solution Toolkit: Classroom Edition from the National Center for Pyramid Model Innovations)
- **Use peers as a source of support.** Design cooperative activities and teach learners to check in with and lean on one another. Peers can help each other tackle challenging work, reflect, and stay accountable, while building communication, collaboration, and positive relationships.[125,126] Model and build routines for how to give and ask for peer support, and give learners chances to practice.

How to get started if you are a 3-5 teacher:

- **Use 1:1 and small-group conferences.** Meet with learners to set goals, plan next steps, track progress, practice a skill, or get feedback. Increasingly have learners come prepared to name what they need help with. (Check out: Conferencing as an Assessment from Learner-Centered Collaborative)
- **Prioritize routines that build belonging and a "safe-to-fail" culture.** Trust and strong relationships let learners take tolerable risks and seek help without judgment, which teaches

them that struggling is part of learning. (See: Safe & Trusting Culture)

- **Teach learners to review their own work and progress and notice where they need support.** Build in regular moments for learners to look back at what they've done and spot where they're stuck or falling short. Over time, this helps learners recognize when they need help.
- **Help learners identify what kind of help they need and where to get it.** As learners can better judge their own understanding, teach them to pinpoint what they're stuck on and choose a fitting source of help: a teacher, a peer, or a resource or tool they can use on their own.
- **Explicitly teach problem-solving and self-help strategies.** Teach learners to work through difficulty on their own first, for example by trying another approach or consulting a resource. When they need help, teach them how to ask for it specifically (*"I understand X but I'm stuck on Y"*). (Check out: Solution Toolkit: Classroom Edition from the National Center for Pyramid Model Innovations)
- **Build peer support into how the classroom works.** Use structured peer work, peer tutoring, and routines for giving and asking for help. Peers can genuinely help one another tackle hard work and stay accountable at this age, and learning to give good help is its own skill.

How to get started if you are a 6-8 teacher:

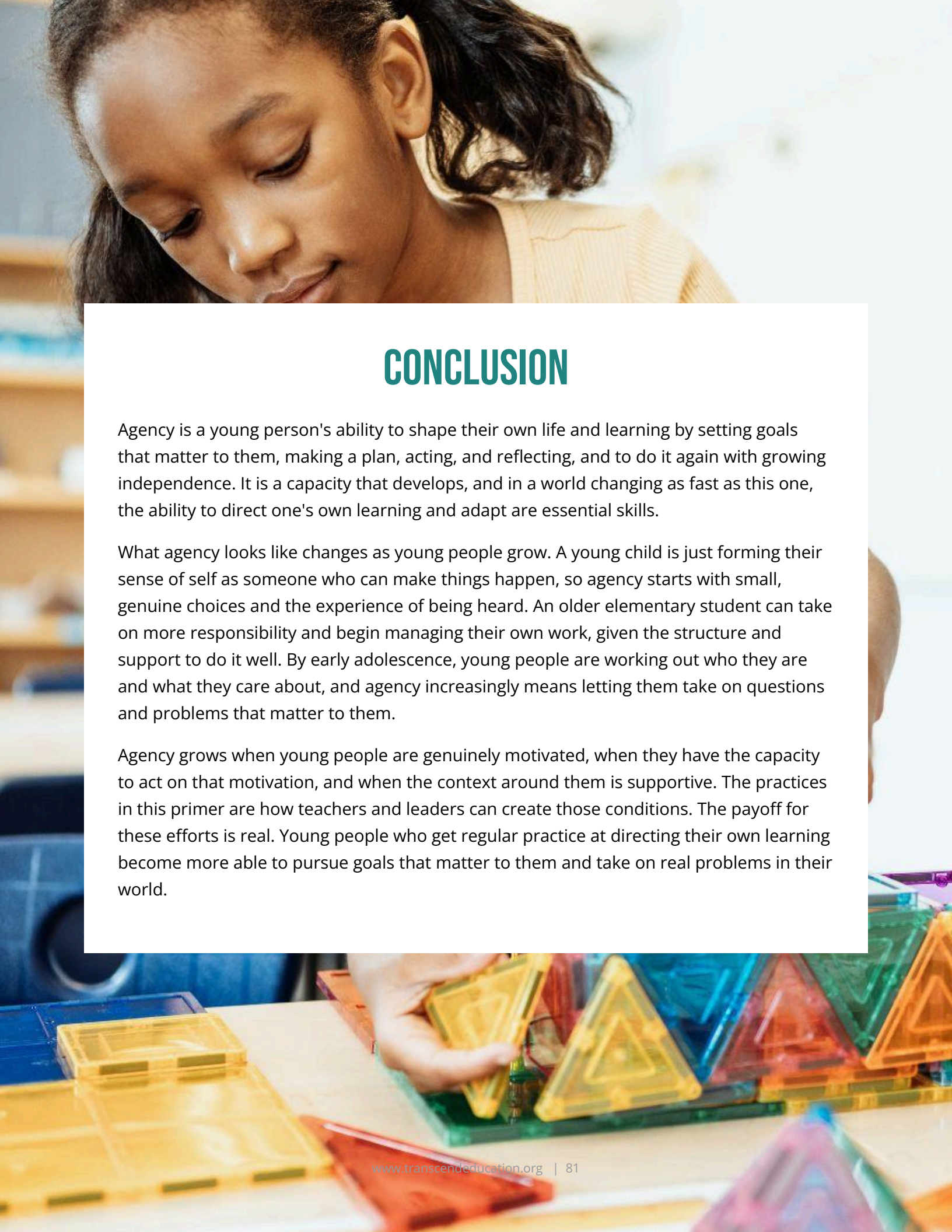
- **Use conferences and let learners increasingly lead.** Meet with learners to review progress and plan next steps, with learners coming prepared to name where they're stuck and what support would help, building the self-advocacy they'll rely on well beyond the classroom.
- **Prioritize routines that build belonging and a "safe-to-fail" culture.** Trust and strong relationships let learners take risks and seek help without judgment, which matters more than ever at an age when asking for help can feel like exposing weakness in front of peers. (See: Safe & Trusting Culture)
- **Have learners regularly review their own progress and data to identify where they need support, then seek it out.** Give them ownership of this: routines where they look at their work, assessment data, and feedback, judge where they're falling short, and act on it without waiting for an adult to flag it first.
- **Teach learners to navigate their options for support.** Young adolescents can choose the kind of help they need, be it a teacher, a peer, a mentor, or a technological program or tool. Help them understand what's available, how to match it to their needs, and how to access it.
- **Keep teaching learners to work through difficulty independently.** Reinforce trying

another approach or consulting a resource before turning to an adult, and asking for help specifically when those other avenues are inadequate or unsuccessful. (Check out: 6 Strategies for Promoting Student Autonomy from Edutopia)

- **Build peer and mentor support into the classroom.** Structured peer tutoring, feedback partners, and mentoring relationships give learners powerful support from people other than you.

How to get started if you are a site or systems leader:

- **Establish consistent systems for learners and adults to access support.** Ensure every learner has at least one trusted adult who can speak to their well-being, strengths, and growth areas. Build small, continuous peer cohorts for staff to check in and support one another (e.g., affinity groups, professional learning communities, faculty circles). *In the middle grades, guaranteeing every learner is known well by one adult often takes deliberate structures like advisory, since learners move between many teachers.*
- **Give high-quality feedback to staff.** Use descriptive praise, 360 feedback, 2x2s or other structures that make feedback actionable.
- **Build dedicated time for targeted support into the master schedule.** Schedule intervention and support time intentionally, so learners don't have to be pulled from other valuable experiences to receive it. Protect time for regular check-ins between learners and a trusted adult.
- **Ensure adults have access to support too.** Create real avenues for staff to seek help, advice, and mentorship. Model it yourself by normalizing asking for support when you need it.
- **Reduce barriers to success.** Ensure all learners can access the resources they need to learn, and make budgeting and operational decisions reflect that priority.[30]
- **Vet and provide high-quality tools that extend support.** Adaptive technology and other tools such as AI-based tutoring can give learners responsive help the moment they're stuck, and expand who can access support. Decide if this is within your strategy and choose them as carefully by prioritizing tools that are compliant, evidence-based, and complementary to human support.



CONCLUSION

Agency is a young person's ability to shape their own life and learning by setting goals that matter to them, making a plan, acting, and reflecting, and to do it again with growing independence. It is a capacity that develops, and in a world changing as fast as this one, the ability to direct one's own learning and adapt are essential skills.

What agency looks like changes as young people grow. A young child is just forming their sense of self as someone who can make things happen, so agency starts with small, genuine choices and the experience of being heard. An older elementary student can take on more responsibility and begin managing their own work, given the structure and support to do it well. By early adolescence, young people are working out who they are and what they care about, and agency increasingly means letting them take on questions and problems that matter to them.

Agency grows when young people are genuinely motivated, when they have the capacity to act on that motivation, and when the context around them is supportive. The practices in this primer are how teachers and leaders can create those conditions. The payoff for these efforts is real. Young people who get regular practice at directing their own learning become more able to pursue goals that matter to them and take on real problems in their world.

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APPENDIX

Key Developmental Milestones, Trajectories, and Transitions Across The Three Grade Bands

Grades K-2

Cognitive Development

- **Children develop in their ability to remember experiences and make connections.** Over time, children are increasingly able to use deliberate and spontaneous strategies to remember information, use knowledge of routines to think ahead, and describe events and other details from memory. Starting in first and second grade, children typically progress to connect the past and the present using approximate time estimates.[49]
- **Children develop early number, space, and object sense, which provide strong foundations for learning**.[46] Children are increasingly able to group objects and words based on a variety of associations (e.g., by physical characteristics, by function).[46,49]
- **Children develop their ability to think symbolically,** using images and symbols to represent ideas, objects, places, etc.[46,49]

Approaches to Learning

- **Young children are motivated by their curiosity and a desire to understand the world around them.**[46,121]
- **Young children seek mastery and competence.**[46,121]
- **Children are intrinsically motivated to play and learn through relevant and interesting tasks/activities.**[46,49]
- **Children develop their ability to reflect and think metacognitively about their learning** as they begin to understand their identities as learners.[51]
- **Children develop confidence in their ability to persist through challenges.** Over time, learners progress toward pursuing a personal goal until it's reached and completing developmentally appropriate activities with minimal assistance from adults.[49]
- **Children develop their ability to set a goal, make a plan to reach that goal, monitor their progress and evaluate their plan, and make adjustments as needed**.[46]
- **Children show flexibility, creativity, and imagination during play and thinking.** Children begin to accept better ideas and incorporate them into plans when they emerge, exercise creativity when completing tasks, experiment and invent, and over time need less detailed instructions.[49]
- **Children develop their ability to solve problems using a range of strategies,** typically progressing to solve problems on their own before seeking help from a peer or adult[49].

- **Children are increasingly able to recognize, name, and identify what caused their emotions;** use words to express what they are feeling; and manage their feelings and emotions using learned strategies.[49]
- **Children are increasingly able to take care of their needs, taking increased responsibility for their personal well-being.** Learners in first and second grade typically progress toward using their growing skills to accomplish personal goals.[49]
- **Children develop interpersonal problem-solving skills.** Over time, children rely less on teacher or adult guidance to resolve social problems, shifting to use supports and other structures to resolve problems on their own.[46,49]
- **Children develop and sustain positive, warm, and trusting relationships with adults.** Children look to trusted adults as resources when they need help and to share interests.[46,49]
    - **Young children look to others (e.g., teachers, parents, or caregivers) for how to approach things** as well as to understand what is safe, interesting, scary, etc.[46]
    - **From an early age, learners know who they can turn to for help when learning** (e.g., asking one adult to help them fix a broken toy and another to find a book on dinosaurs).[46]
- **Children develop positive relationships and interactions with peers.** Children progress toward initiating, joining, and engaging in positive interactions with small groups of their peers. Learners in first and second grade typically progress toward working collaboratively in small groups to achieve a collective goal.[49]

Identity & Personal Development

- **Children begin to develop an understanding of who they are and how they relate to others,** including aspects such as family background, economic experiences, and culture.[50,121]
- **Children begin to develop positive associations with various aspects of who they are,** often taking pride in their background and experiences. Sometimes, children begin to challenge the broader messages they receive from society about different groups and individuals.[121]

Executive Function

- **Executive functions emerge in preschool years but don't fully develop until young adulthood**.[46] Young children make significant progress in executive functioning in the following ways:
    - **Children are increasingly able to focus for sustained amounts of time on activities that are engaging and matter to them**.[46,49]
    - **Children are increasingly able to flexibly adjust to and accept changes in their routines.** They demonstrate cognitive flexibility, adjusting to changed priorities, considering alternatives when problem solving, selecting new strategies, and correcting course as needed.[46,49]

- **Children are increasingly able to inhibit and regulate their actions** in ways that uphold community agreements.[49]

Language & Literacy Development

- **Children develop foundational skills in language and literacy in early childhood** (e.g., foundations for speaking, reading, listening, writing, comprehension, oral language, vocabulary).[46,49]
- **Children develop their voices as writers,** progressing toward writing using conventions.[49]
- **Children develop phonological awareness, skills in phonics, and concepts of print and its uses**.[49]
- **Children typically progress toward using various strategies to make meaning while reading grade-level content**.[49]
- **Children increasingly develop their ability to express their thoughts and needs** as well as engage in and extend conversations with others by asking and answering questions, responding to comments, and connecting ideas shared during the conversation.[49]

Grades 3-5

Cognitive Development

- **Learners can reason logically about tangible, direct experience but struggle with hypothetical or abstract problems**. They use inductive reasoning (generalizing from personal experience) rather than deductive reasoning.[78]
- **Memory strategies (e.g., rehearsal, chunking, mnemonics) increase in deliberate use across the band.** However, using a new strategy is effortful and can slow performance initially. As kids progress through this band, improvement tends to happen more abruptly.[63,128]
- **Metacognition develops substantially.** Learners gain a better sense of how well they're performing and how difficult a task is, and start prioritizing what's important versus not.[66]
- **Learners' grasp of conventional time and their ability to place events on a timeline keep improving across these grades, but neither is fully developed**.[129]

Executive Function

- **The core components of executive function strengthen across this band, but on different timelines:**
    - **Attention and inhibitory control are largely in place.** Learners can focus, filter out distractions, and manage their impulses and emotional reactions far better than in the early grades, so a kid can wait their turn or resist a distraction.[130,131]
    - **Working memory and cognitive flexibility are still maturing.** The same learner may lose track of a multi-step direction or struggle to switch approaches when the first one doesn't work.[61]

    - **Processing speed increases**, letting learners hold and work with more information at once and work through tasks more efficiently.[132]
- **Learners become increasingly able to focus on goal-directed action**. This means they can plan, delay gratification, and persist toward a goal despite distraction.[133]
- **Learners are getting better at managing their actions in time.** They are improving their ability to both remember to carry out an intention at the right moment and, more gradually, adjust their approach based on how much time they have, though the latter keeps developing into early adolescence.[60]

Social and Emotional Development

- **Peer relationships become more psychologically complex**—shifting from friendships based on shared activity toward ones grounded in trust, mutual understanding, and self-disclosure.[134,135]
- **Emotion regulation grows more sophisticated.** Learners can select different coping strategies when upset, recognize they can hold conflicting feelings about the same person, and manage the gap between what they feel inside and what they show on the outside.[136]
    - **Not all coping strategies are equal**: engagement strategies like problem-solving are linked to better social and academic adjustment, while disengagement strategies like avoidance are linked to worse.[67]
- **Learners shift from an inward to outward social view**, becoming clearly aware their feelings are distinct from others', which enables them to genuinely consider others' perspectives (not just imagining them).[137]
- **Learners begin forming friendships and stable peer reputations**. This is because kids develop the ability to control impulses, demonstrate emotional regulation within the peer group, and resolve social difficulties with a more flexible variety of solutions.[138]
- **Learners typically treat rules as fixed and imposed by authority**, though towards the end of the band they begin shifting toward seeing rules as negotiable and socially constructed.[65]
- **Teacher relationships remain just as important than ever through this band, though their orientation shifts.** On the earlier side, kids seek teachers out for comfort/security, while older kids in this range increasingly orient toward peers and typically have more subject-specific (less singular) teachers. This makes some decline in teacher closeness developmentally normal, rather than a sign that the relationship matters less.[52]

Identity and Personal Development

- **Learners at this age seek mastery and approval**. They look for chances to demonstrate skill, and take real pride in accomplishing independent tasks.[47]
- **As learners age through this band, their sense of self becomes increasingly shaped by performance, feedback, and comparison with peers** (a shift from the more inflated, internally-driven self-view of early childhood):
    - **Self-efficacy, or the belief in one's capability to do a task, starts to really**

matter. A learner who doubts themselves may not attempt something they could actually do, while a confident one will try things that stretch them. Kids can now over- or under-estimate their competence.[7,45]

- **Self-esteem becomes tied to productivity and accomplishment relative to peers**. Success builds confidence for future challenges, while repeated failure risks a lasting sense of inferiority.[48]
- **Children start to see themselves more realistically.** Where younger kids tend to have a rosy view of their own abilities, kids this age begin factoring in what others think of them and how they compare to peers. They may start noticing the distance between who they are and who they wish they were, which can begin to chip at their self-esteem.[139]

- **Motivation becomes increasingly subject-specific and differentiated by grade**. Early in the band, learners can distinguish why they're doing something, whether because they are interested, because they value it, or because of outside forces. This distinction is clearest for reading.[58]
- **Intrinsic motivation begins to decline even in the elementary years, with drops showing up within a single school year.** Extrinsic motivation is less predictable; across studies it sometimes rises, sometimes holds steady, and sometimes falls.[57]

Grades 6-8

Cognitive Development

- **Young adolescents develop the capacity for abstract and logical thought.** This lets them pose questions, test hypotheses, and reason about complex, higher-order relationships and about time (past, future, long-term goals), though they still sometimes over-generalize from personal experience.[78,79]
- **Young adolescents grow more able to reason about social rules and expectations,** questioning authority and challenging the standards around them.[97]
- **Metacognition is actively developing but has not yet matured.** Within these years, learners engage in metacognitive thinking more often during problem-solving, and it plays a growing role in how well they perform.[84]
- **Young adolescents grow capable of more complex abstract thinking and cognitive control.** This is underpinned by major brain changes, including a rise in plasticity, that begin in this band and continue well beyond it.[141]

Executive Function

- **Future time perspective begins to develop, as a more fantasy-like sense of the future gives way to a more realistic one.** It remains short during this band and lengthens substantially only in later adolescence, as young adolescents are still developing the capacity to orient toward the long term.[48,143]

- **Executive functions like planning and strategic thinking advance, but they're still maturing and work less efficiently than an adult's.** This growing capacity lets young adolescents begin anticipating their needs and setting personal goals.[81]
- **By early adolescence, the rapid childhood gains in processing speed have slowed, but speed continues improving gradually until it peaks in late adolescence.**[132]
- **Young adolescents get better at reining in an immediate impulse or reaction for the sake of a longer-term goal.** Holding that bigger goal in mind is part of what helps them override the in-the-moment urge.[144]
- **Working memory continues developing.** After its most rapid growth in childhood, young adolescents show a brief renewed period of accelerated growth rather than a simple plateau.[145]

Social and Emotional Development

- **Young adolescents become more reactive to both reward and threat.** They're drawn to new, intense, and rewarding experiences and more sensitive to perceived danger, because the brain's reward and emotion systems mature faster than the control systems that regulate them. This reactivity cuts both ways: it can drive impulsive or risky decisions, but it also pushes young adolescents to seek out novelty, explore new environments, and navigate major transitions in ways not seen in the same form in younger children or adults. This tendency toward sensation-seeking is somewhat more pronounced in boys.[81,82,141,146]
- **Moral reasoning keeps maturing, building on the earlier shift from seeing rules as fixed to seeing them as changeable.** Still, young adolescents mostly judge right and wrong by social rules and what others approve of. The more independent, principled kind of moral reasoning, thinking through ethical questions for oneself, tends to come later, once abstract thinking is more fully developed.[78]
- **Students tend to disengage somewhat as they move through adolescence, but not evenly.** Their sense of belonging at school drops the most, how much they participate drops next, and their investment in the actual learning drops least. A lot of this comes from the move to middle school itself, not just from getting older: schools get bigger and less personal, with less freedom and more competition.[4,5]
- **Peers matter more now than they used to, and more than almost anything else.** Peer approval increasingly outweighs adult approval, and young adolescents care deeply about friendships built on commonality, often with fierce loyalty. At the same time, social status and respect grow more important, prompting experimentation with new behaviors as they seek both social position and a sense of identity.[72,73,74,147]
- **Young adolescents push for more autonomy, but the developmental task of this grade band is balancing that independence with staying connected,** not pulling away from adults entirely**.**[148]
- **The desire for strong, positive teacher relationships continues and may even intensify.** Teachers can provide stability and guidance through this period of great change, and these relationships are pivotal for both academic motivation and students' overall sense of belonging in school.[74]

- **Academic participation can carry real social risk**. Peer culture shapes whether visible academic effort and success is perceived as a social cost or benefit.[17]
- **Coping shifts from managing feelings to tackling the problem itself.** Earlier in this band, young adolescents tend to cope by dealing with their emotions about a stressor (e.g., seeking comfort, venting, distracting themselves); later, they lean more toward addressing the problem directly (e.g., making a plan, taking action).[67,85]
- **Young adolescents experience increased social vulnerability.** They are more exposed to bullying and social exclusion, which makes safe, trusting environments especially important during these years.[82,149]

Identity and Personal Development

- **Young adolescents are especially motivated by content that feels personally relevant and connects to their emerging identities, and they favor active over passive learning.** Their curiosity and wide-ranging interests, present since earlier childhood, continue to flourish.[73,74]
- **Intrinsic motivation declines through this band, continuing a drop that began in the earlier grades and steepens to its sharpest single-year fall between ages 13-14:**
    - **Not all motivation drops equally**. Intrinsic motivation falls most, while extrinsic motivation stays relatively stable.[32]
    - **Much of the decline is explained by unmet needs for autonomy, competence, and relatedness.** When those needs are met, the decline is largely buffered.[74,92]
- **Self-concept and confidence commonly decline during the transition to middle school, with substantial variation by gender.** Girls in particular may shift from a more confident early self-concept toward greater vulnerability to self-esteem difficulties.[150]
- **Peers become an important new source of self-efficacy beliefs.** When peers are academically unmotivated, young adolescents' own sense of academic capability tends to decline. When they watch peers succeed, their own self-efficacy tends to rise.[140,151]
- **This band straddles a major identity shift: younger adolescents are still defining themselves largely by what they can do well, continuing the competence-focused stage of the earlier grades, while older ones move into actively exploring and experimenting with who they are.**[48]
- **Identity development depends on both exploration and commitment—not just passively discovering who you are, but actively trying on and then committing to values, beliefs, and roles.** This exploration spans many domains, including ethnic-racial identity and sexual and gender identity, both of which come into sharper focus in this band.[68,149]
- **Young adolescents start to experience themselves differently across settings, acting and feeling like somewhat different people with family, with friends, and in the**

classroom. These different "selves" can feel inconsistent or even contradictory, especially as interests shift quickly and peer opinion carries so much weight.[152]

- **Identity and values become a major driver of motivation and choices.** Young adolescents (and older ones too) act increasingly as "motivated agents" guided by their values, motives, and hopes, rather than by external rewards or peer norms alone.[70,71,77]
- **Young adolescents begin to grasp the social dimensions of identity and power.** They come to understand privilege and differences in group status, and, through developing critical consciousness, to recognize injustice around them and feel they can do something about it.[41,68,76]
- **Purpose—a stable life aim connecting to something meaningful to oneself and consequential beyond oneself—begins developing as a distinct capacity, though it's just beginning,** since forming a real sense of purpose requires thinking far ahead, which young adolescents are still learning to do.[40]
- **Young adolescents start pushing for independence—but selectively.** They especially want control over personal things like their hair, clothes, and how they talk, more than older teens do, while feeling they already have enough say over bigger moral choices. They also tend to think their friends have more freedom than they actually do, which can push them to want even more.[97]



Igniting Agency in K-8 Learning Environments will help you and your community understand what agency is, why it's critical to ignite agency across a young person's schooling, what enables it, and how to design learning environments that are supportive of it.

