

WHY TEACH STUDENTS HOW TO LEARN?

The Research Case for Explicit Learning-Skills Instruction — and the StudySmarts Framework



Schools spend thousands of hours teaching students what to learn. Students also need to be intentionally taught how to learn — and supported in believing they can succeed and finding a reason to engage.

01 / THE CASE

Executive Summary

Schools routinely teach students what they are expected to learn, yet students are also expected to independently manage the process of learning: planning, organizing, sustaining effort, selecting effective strategies, monitoring understanding, and adapting when a strategy is not working. The evidence reviewed in this brief supports explicit instruction in these learning processes rather than assuming students will acquire them on their own.

The research base is especially strong for metacognition and self-regulated learning. It also shows meaningful relationships among academic self-efficacy, motivation, learning strategies, persistence, and performance. StudySmarts organizes these interconnected needs into three practical student-facing pillars: Self-Worth / Confidence (I CAN), Motivation (I WILL), and Study Skills (I KNOW HOW).

The central conclusion is straightforward: teaching students how to learn is not separate from academic instruction. It strengthens students' capacity to engage with academic instruction more independently and effectively.

**I CAN****Self-Worth / Confidence**

Can I do this?

**I WILL****Motivation**

Why should I do this?

**I KNOW HOW****Study Skills**

How do I do this?

The Case for Teaching Students How to Learn

Academic content is essential, but content instruction alone does not ensure that students know how to organize themselves, manage time, prepare for tests, retain information, monitor their own learning, or choose effective strategies. Research across self-regulated learning, study strategies, metacognition, executive function, and academic-skills development supports intentional instruction in these areas.

02 / THE RESEARCH

Teaching effective learning

1 Self-Regulated Learning Training Programs

Theobald et al. (2021) conducted a meta-analysis of 49 studies involving 5,786 university students and found that extended self-regulated learning training improved academic performance, cognitive and metacognitive strategies, resource-management strategies, and motivation. Importantly for the broader StudySmarts framework, the motivational gains included self-efficacy. [Source: Contemporary Educational Psychology / ScienceDirect](#)

Biwer et al. (2022/2023) found that a learning-strategy training program helped students develop more accurate knowledge about effective and ineffective strategies and shift toward strategies such as interleaving, elaboration, and distributed practice. Students improved academically across the year, and additional remediation supported lower-performing students. [Source: PubMed Central](#)

2 High-Impact Study Skills for PreK–12

Wilmore (2020) makes the case that many capable students underperform because they do not know how to study effectively, organize their work, complete more complex assignments, or comprehend and retain information. The work identifies high-impact study skills intended to improve learning across diverse PreK–12 student groups. [Source: ERIC](#)

3 Effective Learning Techniques

Donoghue & Hattie (2021) synthesized 242 studies, 1,619 effects, and 169,179 unique participants. Their meta-analysis found that distributed practice and practice testing were among the most effective of ten commonly discussed learning techniques. Because these are learnable behaviors, the findings support intentionally teaching students how to study rather than assuming they will discover effective methods on their own. [Source: Frontiers in Education](#)

02 / THE RESEARCH

Supporting the whole learner

4 Study Strategy Interventions

The Learning Scientists have translated cognitive-science research for educators and students, emphasizing that effective study strategies can be explicitly taught and practiced. This body of work reinforces a central point: students often rely on familiar or comfortable approaches even when stronger learning strategies are available. [The Learning Scientists resource](#)

5 Cognitive, Motivational, and Affective Outcomes

Motevalli et al. (2021) studied high-school students receiving study-skills training and reported significant gains in qualitative academic achievement, including increases in self-efficacy, planning, and motivation, along with improvement in emotional outcomes. This is especially relevant because it connects learning skills with how students think and feel about their ability to succeed. [Source: ERIC](#)

6 Accessibility for Students with Learning Differences

The IRIS Center at Vanderbilt/Peabody explains that students with learning disabilities and ADHD can have difficulty with executive functions such as organizing materials and time, retaining and recalling information, and selecting, monitoring, and using learning strategies. IRIS emphasizes explicit study-strategy instruction and notes that study-skills instruction can improve academic outcomes for all students, with particular importance for students with LD and ADHD. [Source: IRIS Center](#)

7 Academic Skills, Success, and Well-Being

The University of Oxford Academic Skills Literature Review connects academic-skills development with student success and well-being. Its synthesis reports that effective strategies for managing learning are associated with reduced anxiety, increased confidence, and a stronger sense of belonging, and it argues for embedding academic-skills development into the student learning experience rather than treating it only as an add-on. [Source: University of Oxford Centre for Teaching and Learning](#)

03 / EVIDENCE AT A GLANCE

What the Evidence Says

Benefit	Evidence-Based Rationale
Improved academic performance	Explicit learning-strategy and self-regulated-learning instruction can improve academic outcomes.
Better planning and self-regulation	Students can be taught to plan, monitor, manage, and adjust how they learn.
More effective study behaviors	Students can replace weaker habits with strategies such as distributed practice, practice testing, elaboration, and interleaving.
Benefits across student needs	Explicit instruction is valuable broadly and is especially important for students who struggle with executive function, LD, or ADHD.
Greater self-efficacy and motivation	Some intervention research shows gains not only in strategies but also in students' confidence in their ability and motivation to engage.
Reduced academic strain	Academic-skills development is linked in the literature with confidence, well-being, and reduced anxiety.
Long-term readiness	Learning how to learn supports greater independence for secondary school, higher education, work, and lifelong learning.

TEACHABLE SKILLS. GREATER INDEPENDENCE.

04 / RESEARCH FOUNDATIONS

Research Foundations for the Three StudySmarts Pillars

**I CAN****Self-Worth / Confidence and Academic Self-Efficacy**

Academic self-efficacy refers to students' beliefs about their ability to successfully perform academic tasks. Honicke and Broadbent's systematic review of 59 studies found a moderate positive relationship between academic self-efficacy and academic performance and identified effort regulation, deep-processing strategies, and goal orientations as important related factors. The authors also cautioned that the evidence does not, by itself, establish a simple causal relationship. That distinction matters: confidence should not be treated as a substitute for effective instruction, but as an important part of the learning system. [Source: Educational Research Review / ScienceDirect](#)

Richardson, Abraham, and Bond's systematic review and meta-analysis of psychological correlates of university academic performance likewise examined self-efficacy, motivation, goal-related factors, and learning strategies among the variables associated with achievement. Together, this research supports treating students' beliefs about their academic capability as relevant to how they approach learning. [Source: Psychological Bulletin / PubMed](#)

**I WILL****Motivation, Engagement, and Persistence**

Motivation influences whether students initiate learning, how much effort they invest, and whether they persist when work becomes difficult. OECD's analysis of PISA 2022 describes learning strategies, motivation, and self-belief as an interconnected 'triangle of learning.' Its findings show that intrinsic motivation is positively related to students' use of learning strategies and that self-beliefs are closely connected with motivation and resilience. [Source: OECD, PISA 2022 Results Volume V](#)

This reinforces an important educational principle: giving students a strategy does not guarantee that they will use it. Effective learning also requires students to engage, sustain effort, and make purposeful choices about their learning. Motivation therefore functions as a bridge between knowing what to do and consistently doing it.

04 / RESEARCH FOUNDATIONS

I KNOW HOW

Study Skills, Metacognition, and Self-Regulation

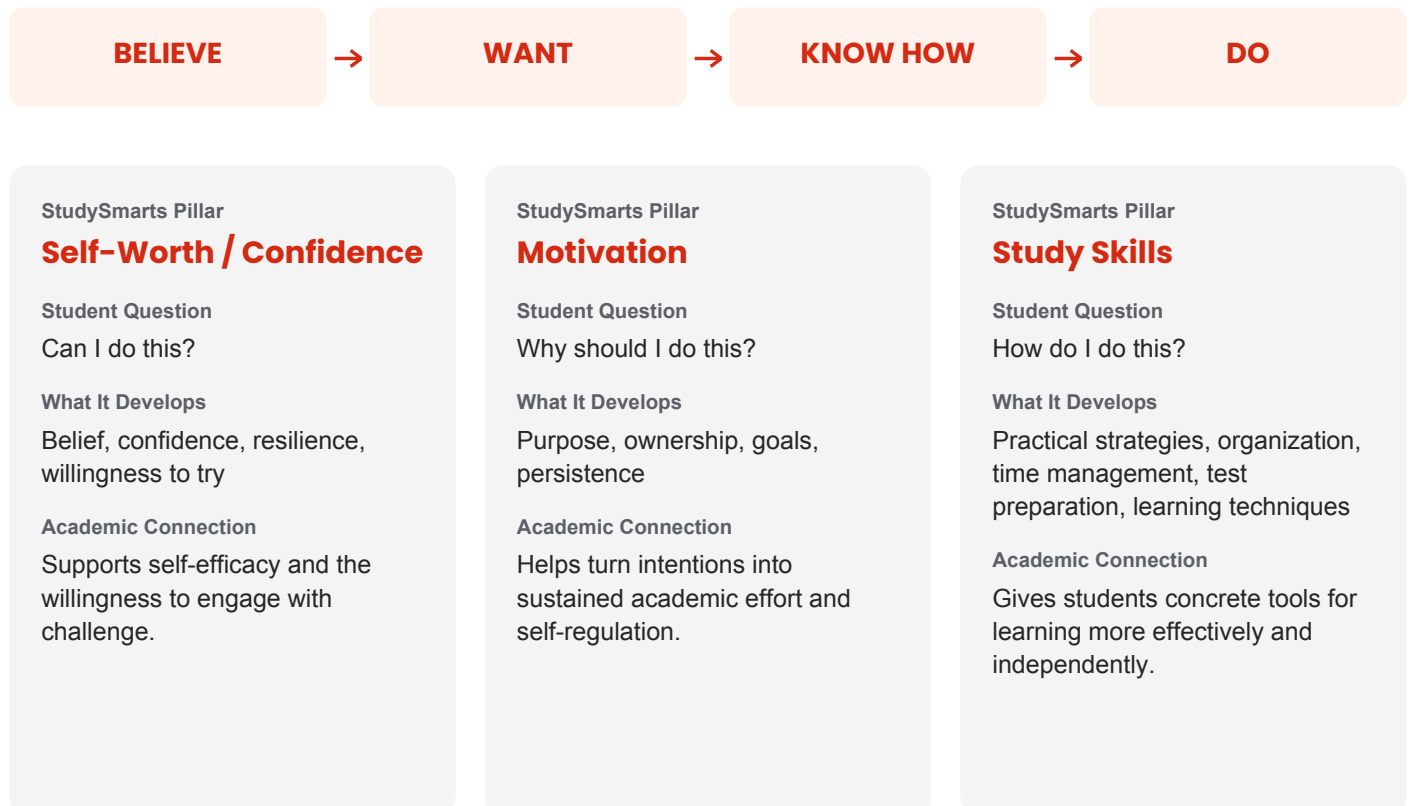
The evidence base is particularly strong for explicit instruction in metacognition and self-regulation. The Education Endowment Foundation’s updated Teaching and Learning Toolkit synthesizes 355 studies and rates metacognition and self-regulation as a high-impact, very-low-cost approach, with an average impact equivalent to eight additional months of progress. The EEF emphasizes explicit teaching of strategies that help students plan, monitor, and evaluate their learning, while also noting that implementation quality and context matter.

Source: Education Endowment Foundation

The EEF’s 2025 guidance further emphasizes that students should not be assumed to possess these skills automatically. Teachers can explicitly model, scaffold, and gradually release learning strategies so students become increasingly independent. Source: EEF Metacognition and Self-Regulated Learning Guidance

The StudySmarts Framework: More Than Study Skills

The research above establishes a strong case for teaching students effective learning and self-regulation strategies. StudySmarts builds on that foundation by addressing two additional conditions that influence whether students will actually use those strategies: self-worth/confidence and motivation.



05 / THE STUDYSMARTS FRAMEWORK

Why the Three Pillars Belong Together

A student may know an effective study technique and still not use it consistently. Knowledge of a strategy does not automatically produce action. Students are more prepared to act when they have both the tools and the internal resources to engage.

- Self-Worth / Confidence answers: “Do I believe I am capable of improving and succeeding?”
- Motivation answers: “Do I have a reason to begin, persist, and take ownership?”
- Study Skills answers: “Do I know what to do and how to do it effectively?”

I CAN + I WILL + I KNOW HOW**Self-Worth / Confidence + Motivation + Study Skills****More Effective Academic Action**

The StudySmarts Value Proposition

StudySmarts is designed around a simple idea: students need more than academic content. They need to understand their value and capability, develop the motivation to take ownership of their education, and learn practical strategies for succeeding in school.

Schools teach WHAT to learn. StudySmarts helps teach students HOW to learn — and helps develop the confidence and motivation to put those skills into action.

A Practical Case for Schools

Teaching students how to learn should not be viewed as remediation reserved only for students who are failing. It is a form of academic preparation. As students advance through school, they are expected to become increasingly independent: manage multiple classes, remember deadlines, organize materials, prepare for assessments, complete long-term assignments, and make decisions about how and when to study. Those expectations increase even when direct instruction in the underlying skills does not.

A school that intentionally develops self-worth/confidence, motivation, and study skills is therefore not stepping away from academics. It is strengthening students' capacity to engage with academics.

06 / FROM EVIDENCE TO PRACTICE

Implications for Schools

The evidence supports treating learning skills as teachable competencies rather than assuming students acquire them independently. Schools should consider intentional, developmentally appropriate instruction that helps students strengthen their beliefs about learning, develop motivation and ownership, and acquire practical strategies for planning, studying, monitoring understanding, and responding to academic challenges.

For greatest credibility and educational value, learning-skills instruction should complement — not replace — strong content teaching. The goal is to help students become increasingly capable of managing their own learning within authentic academic work.

What the Research Does — and Does Not — Establish

The research cited in this brief supports the educational foundations underlying the StudySmarts framework: academic self-efficacy is associated with academic performance; motivation and self-belief are related to engagement and strategy use; and explicit instruction in learning strategies, metacognition, and self-regulation can improve student outcomes.

The cited studies did not evaluate the StudySmarts program itself. Therefore, this document should not be read as claiming that the research proves a specific causal effect for StudySmarts. Rather, StudySmarts is a practical framework designed around principles that are supported by established research. Program-specific outcome claims should be based on direct StudySmarts implementation and evaluation data.

This distinction strengthens the case for StudySmarts by separating the evidence for the underlying educational principles from claims about any particular curriculum or implementation.

The Bottom Line

Students should not have to discover effective learning by accident.
Teach them to believe they can improve.
Give them reasons to engage.
Teach them how to learn.
That is the StudySmarts framework.

Better Grades. Less Stress. More Fun.

07 / SOURCES

Research & resources

Additional Research Supporting the StudySmarts Framework

Honick, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: A systematic review. *Educational Research Review*, 17, 63–84. [Link](#)

Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin*, 138(2), 353–387. [Link](#)

OECD. (2024). *PISA 2022 Results (Volume V): Learning Strategies and Attitudes for Life*. OECD Publishing. [Link](#)

Education Endowment Foundation. (2025). *Metacognition and self-regulation: Teaching and Learning Toolkit; and Metacognition and Self-Regulated Learning, Second Edition guidance report*. [Link](#)

Selected Research & Resources

Theobald, M. (2021). Self-regulated learning training programs enhance university students' academic performance, self-regulated learning strategies, and motivation: A meta-analysis. *Contemporary Educational Psychology*, 66, 101976. [Link](#)

Biwer, F., de Bruin, A., & Persky, A. (2023). Study smart – impact of a learning strategy training on students' study behavior and academic performance. *Advances in Health Sciences Education*, 28, 147–167. [Link](#)

Wilmore, E. L. (2020). High Impact Study Skills for Diverse PreK–12 Subgroups. [Link](#)

Donoghue, G. M., & Hattie, J. A. C. (2021). A Meta-Analysis of Ten Learning Techniques. *Frontiers in Education*, 6, 581216. [Link](#)

Motevalli, S., et al. (2021). The Effects of Study Skills Training on Qualitative Academic Achievement among Students. *Asian Journal of University Education*, 17(3), 130–141. [Link](#)

IRIS Center, Vanderbilt University. Importance of Teaching Study Skills Strategies. [Link](#)

University of Oxford Centre for Teaching and Learning. Academic Skills Literature Review: The Impact of Academic Skills Development on Student Outcomes in Higher Education. [Link](#)

The Learning Scientists. Resources on evidence-based learning strategies. [Link](#)

StudySmarts Suggested Implementation Summary

For Students, Teachers and Parents Utilizing The Annual Site License!

Purpose:

To build consistent student growth in self-worth, motivation, mindset, and study skills through a structured implementation that reinforces learning habits and self-evaluation at key academic transition points - upper elementary, middle school, and high school entry.

3-11

minute videos

~2.5

hours of video

32

workbook pages

5

true/false questions

Recommended Implementation Ideas:

Here are a few recommended implementation ideas with the understanding that both courses are broken down into 3-11 minute videos with a total video run time of about 2.5 hours along with an accompanying 32-page workbook that is unique to both courses. After each video session, there are 5 true/false questions and a discussion guide.

Essentially, students participate as a group by watching the videos and taking notes in the workbook while a facilitator leads them through the material followed by discussion questions. Regardless of which method is chosen, we recommend that your team's capability matches the method. Upon completion, teachers will have an easier time in classrooms where students are more confident and come prepared with a positive mindset and effective study methods.

Better Grades. Less Stress. More Fun.

01 / IMPLEMENTATION METHODS

Choose your implementation method

1. One-day boot camp

This method can be completed in a single day in a larger group in an assembly type format with breakout sessions or completed in a single day with smaller groups in classrooms with breakout sessions. This model is an effective way to have all the students, teachers and administrators participate and begin to use the skills immediately in real time in real classes following the boot camp. This is also effective because it breaks students out of a normal routine and creates a lasting memory. Strong facilitation is required with this method so students stay on track. We recommend snacks and stretch breaks with this method and plan on taking most of the school day so things don't feel rushed. (Have students dress in camo gear!)

2. Advisory

This method is the easiest and can be implemented immediately in advisory every day until completed or implemented at the advisors discretion a few times a week or once a week. This model is effective because it can be done without adding "one more thing" to the school day.

3. Before or after a core class or elective

Typically, this method is used at the beginning or the end of a social studies class or during an elective where a teacher that sees every student in a particular grade simply implements StudySmarts as they see fit throughout the school year. Some facilitators will have students complete the course every day until completion, a couple times a week or once a week.

CORE IMPLEMENTATION MODEL

Introduce. Review. Master.

5

GRADE

5th Grade – Introduction to StudySmarts (5th-8th Grade Course | 27 videos)

- Students are introduced to foundational StudySmarts concepts like self-worth, motivation and study skills.
- Activities emphasize building confidence and responsibility for learning.
- Teachers integrate StudySmarts with all 5th grade students.
- Helps prepare students for the academic and personal transition into middle school.

7

GRADE

7th Grade – Review of Study Smarts (5th-8th Grade Course | 27 videos)

- Students revisit and deepen understanding with the StudySmarts principles. Responsibilities and expectations change dramatically in two years.
- Lessons focus on maintaining motivation, managing increased workload, and further developing independent learning habits.
- Reinforces consistency between elementary and future high school mindsets.
- Teachers embed StudySmarts strategies in core classroom practice to promote self-regulation and resilience with every 7th grade student.

9

GRADE

9th Grade – Mastery with Study Smarts (9th-12th Grade Course | 18 videos)

- Students master StudySmarts strategies for success in high school and beyond.
- StudySmarts emphasizes decision-making, focus, accountability, and preparing for future goals.
- Students are reminded that their first year of high school often sets the academic tone for their high school career so it is imperative to start correctly with a purpose and a plan.

The first year can be implemented as suggested or you may have a better way to fit your context. We simply want to provide ideas for your consideration. Please reach out and we can brainstorm with you as well!

A 12th-grade refresher before college is also very effective. This will likely not be a formal implementation, but can be used independently by utilizing their personal membership.

Special Note: Courses are stand alone and “progression” is not necessary. In other words, it can be used in 7th grade without students using it in 5th grade. The same is true for students using it in the 9th grade; participation in 7th grade is not necessary.

03 / SCHOOL COMMUNITY

Build a shared learning culture

Teacher Integration

(If this is all that happened as a resource, it would be worth it!)

- Consider having all teachers at every grade level complete StudySmarts training for professional development or CE credit, ensuring consistent language, reinforcement, and classroom application across all subjects and grade levels.
- StudySmarts becomes part of the school culture rather than a single program - promoting shared expectations and academic alignment.

Parent Engagement

(If this is all that happened as a resource, it would be worth it!)

- StudySmarts serves as a parent resource during Parent-Teacher Conferences and orientation events. Parents can create memberships as well.
- Families receive access to the StudySmarts training at home to be a bridge between classroom learning and home support, strengthening the school-family partnership.

New Student Integration

- New students complete StudySmarts upon entry to the school to align with existing student learning habits. A separate orientation could be utilized or a natural integration.
- This ensures continuity of mindset and academic skills for all learners.

C.A.P.E.

Coaching and Peer Empowerment (Optional Extension)

- Select student leaders to become heroes through C.A.P.E. (Coaching And Peer Empowerment) - empowering peers through mentoring, tutoring, and leadership.
- Builds confidence, connection, and a culture of encouragement throughout the school.

Outcome

By introducing StudySmarts in 5th grade, reinforcing in 7th, and mastering in 9th, schools create a seamless system of growth that strengthens motivation, academic habits, and self-worth at every key transition - ensuring students are prepared not just to learn, but to thrive. (Or if all that happened is a teacher and parent resource, it would be worth it!)

04 / RESOURCES AND TIMING

Prepare for a flexible rollout

Workbooks

Each course (5-8 and 9-12) comes with its own workbook.

Options:

Digital PDF (included):

It is printable and/or fillable version for notes and exercises.

Hardcopy workbook (optional, but recommended):

\$5.00-\$10.00 per workbook based on quantity with free shipping or delivery.

Workbooks may also be funded a few different ways without the school dipping into the budget. Ask StudySmarts to locate a sponsor or ask parents to send in \$5.00 to cover the cost of their workbook.

Note: While digital workbooks are fully functional and reduce cost, hard copies tend to streamline implementation and provide students with a lasting resource.

When to Implement?

StudySmarts can be rolled out any time of year, depending on your goals.

Recommended Start Times:

Beginning of the school year

After any 9-week grading period

Start of second semester and new year (January)

During summer programs

Your site license is valid for one full year from the date of purchase. The course can be completed in a single day or stretched over nine-weeks or a full semester, depending on your chosen format.

We understand every school is different, and that's why StudySmarts is designed with flexibility in mind. This guide is just the beginning. We're here to help you develop the approach that best empowers your students, staff, and families.

Let us know how we can support you as you move forward!

Dear Parents and Guardians,

This year, we're excited to involve you more fully in helping students build self-worth, motivation, and effective study skills. Through our partnership with StudySmarts, you'll have access to the same proven tools students are using in the classroom.

For nearly three decades, StudySmarts has supported families and schools just like ours by teaching life-changing skills like:

- Building self-worth and motivation
- Time management and goal-setting
- Organization, note-taking, and procrastination prevention
- Recognizing learning styles and reading strategically
- Strengthening vocabulary and test-taking techniques

...and more, all accessible online on any device.

Your child's training includes streaming video lessons and workbooks for grades 5-8 and 9-12 - with roughly 2.5 hours of content, carefully broken into short, engaging segments to keep learners actively involved (e.g. short quizzes, self-assessments and completion certificates)

Please take a moment to create your membership. Each membership requires a separate email account. We recommend creating one membership for each member of your family.

Just follow these steps:

1. Visit www.studysmarts.com and click "Get a Membership".
2. Enter coupon code **(CUSTOMCODEHERE)** during registration. (You will see a \$50 credit applied. No payment is required.)
3. Click Get Now

Once you're registered, you'll have up to 12 months of access for review, practice, and goals planning.

We look forward to hearing how StudySmarts enhances your child's confidence and academic success. Thank you in advance for helping us make this experience impactful for every family.

Sincerely,