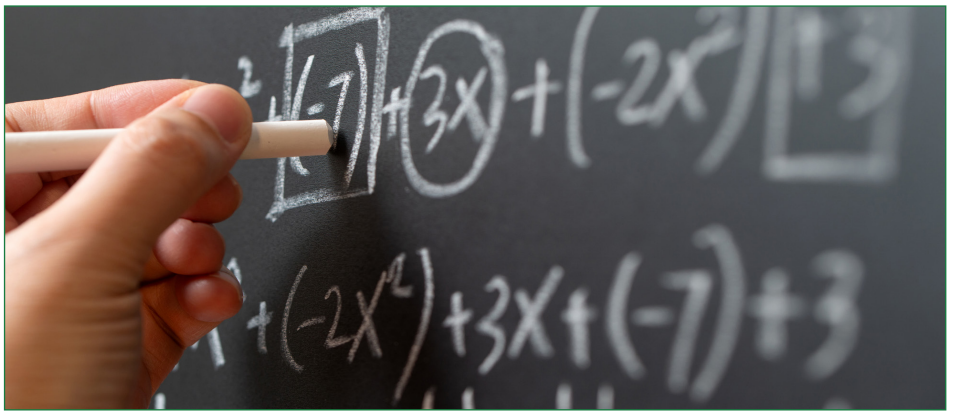
Huntington LEARNING CENTER

HUNTINGTON NEWS FOR EDUCATORS

IN THIS ISSUE

TIPS TO SPARK YOUNG STUDENTS' INTEREST IN MATH AND SCIENCE



Getting students interested in math and science doesn't have to involve complex labs and equations. Some of the most important groundwork happens in early elementary school, when children are innately curious and just starting to explore how the world works.

As a teacher, you have a unique opportunity to shape how your students feel about math and science. The way you approach these subjects can make them seem useful, engaging and approachable.

What's the secret? Make learning fun. Tie lessons to the real world. And express your own enthusiasm for the subjects. Here are a few ways to do so:

CONNECT MATH AND SCIENCE TO EVERYDAY LIFE

Show students where math is a part of the world they live in, from the patterns that exist in nature to the shapes of their bedrooms. Introduce science concepts as fascinating questions — what happens in the clouds and the sky when it rains? How do seeds become plants? Why does ice melt and water boil? Use photos and videos to help students see what they learn in action.

ENCOURAGE EXPLORATION

Create a box or board for students to write down science- and math-related questions whenever they wish. Set aside time each week to discuss one or two of them, enhancing the discussion with a real object or visual aid you find ahead of time. If you have stations in your classroom for small group work, make one of them an exploration station, equipped with simple materials like magnifying glasses, measuring tapes and droppers and a stack of note cards with simple science activities written on them.

MAKE IT HANDS-ON

Learning by doing is effective with students of all ages, but especially with students in early elementary school. Whenever possible, find ways to teach through active learning and incorporate the use of manipulatives, challenges or experiments. Demonstrations of how things work help students visualize concepts they have learned or read about, and activities that allow students to use their hands are both enjoyable and effective.

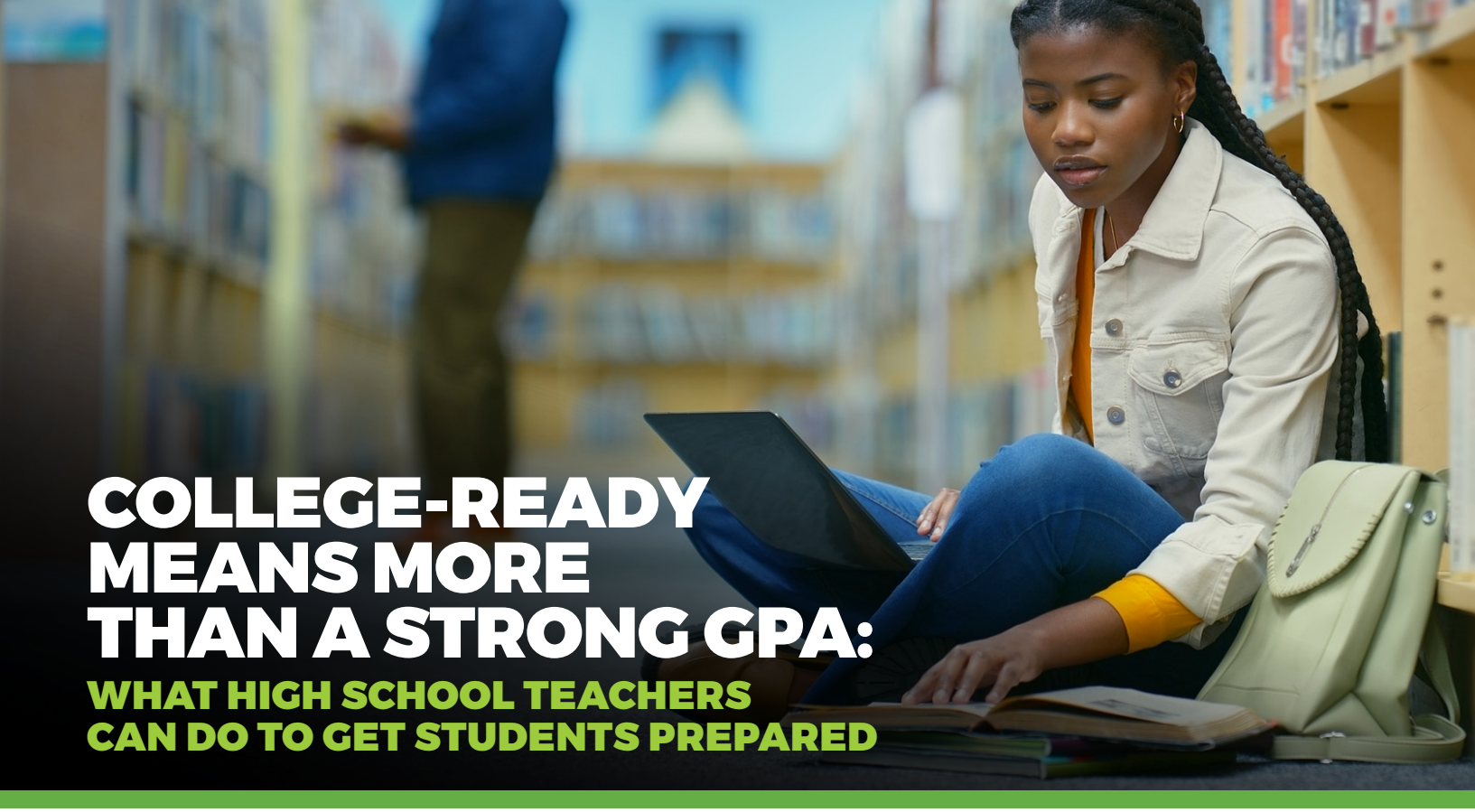
SHARE YOUR EXCITEMENT

There's no getting around it: some students are intimidated by math and science and write it off as hard and boring. Be enthusiastic when teaching new skills and units, highlighting your favorite type of math, the scientific wonders you find captivating and your approach to tackling challenging concepts. The more you speak about math and science as fun, fascinating subjects that encourage students to explore their curiosities, the more likely that attitude will rub off on your students.

POINT OUT WHAT STUDENTS MIGHT NOT REALIZE

Students might be surprised to know that both math and science are deeply creative disciplines that involve imagination. Many math problems can be solved in multiple ways, which means that students learn to figure out how to solve problems. Science is more than a school subject. It is a lens for viewing and understanding the world better. From everyday phenomena to the universe's biggest questions, science helps us make sense of how and why things work the way they do. This mindset about math and science fosters a classroom culture that values learning for its own sake.

Do some of your students struggle with math and/or science despite your best efforts? Huntington can help young students solidify their understanding of foundational skills that will serve as building blocks for future grades. You can feel good about referring students and parents to Huntington. We provide every student the support they need to succeed in subjects like math and science — and learn to appreciate them too.



COLLEGE-READY MEANS MORE THAN A STRONG GPA:

WHAT HIGH SCHOOL TEACHERS CAN DO TO GET STUDENTS PREPARED

There are many skills, habits and mindsets that students need to thrive at college—and in the long term. As a high school teacher, one of your goals is to prepare students for college-level academics, but that's just the starting point. Here are the essential skills and traits that help students perform their best:

Strong reading and thinking skills – College students do a lot of independent reading and must be able to engage deeply with a wide range of texts. They need to be able to identify main ideas and themes in complex texts, analyze various perspectives, identify evidence and think critically to interpret texts.

A solid math foundation – Not every college major requires students to take advanced math courses, but students will not be able to avoid math entirely. Typically, students must be comfortable with algebra and capable of interpreting and analyzing data. They must be able to solve problems and try different strategies when their first attempts are unsuccessful.

Good research and writing skills – Essays and research papers are a mainstay of college, and your students will be expected to know how to conduct thorough research, cite sources and write clearly. Whether students are making an argument or summarizing information, their writing should be coherent, well-organized and tailored to the audience and purpose (i.e., using the right tone and voice).

Executive functioning skills – In addition to academic skills, students need strong "soft" skills to direct their own learning. They must stay organized, juggle multiple responsibilities and plan ahead. Executive functioning skills support effective studying, managing deadlines and keeping track of assignments for several classes.

HOW HIGH SCHOOL TEACHERS CAN HELP

No matter what subject you teach, you play a key role in building your students' college readiness by helping them establish good habits. A few tips:

- Encourage good time management and the use of organizational tools like planners or planner apps and digital to-do lists/reminders.
- Nurture higher-level thinking by asking open-ended questions, inviting students to share their thinking and rationale, and encouraging students to challenge one another in a respectful way.
- Give due dates with milestone check-ins, but let students plan their time. College has many larger projects. Teach students how to plan backward from deadlines by breaking assignments into smaller, manageable tasks to stay on track and avoid last-minute stress.
- Show students different note-taking styles and give tips on how to review and revise their notes to enhance retention. Good notes should serve as a study tool for quizzes and tests.
- Let students make mistakes and learn from them. Encourage them to reach out to you when they have questions and ask for clarification in class when needed. This will get them comfortable communicating with teachers and advocating for themselves.
- Provide plenty of opportunities to practice college-level research. Have students work with the school librarian to learn best practices and teach them about proper citation and modern-day plagiarism.

Finally, talk with your students explicitly about college expectations and what readiness actually means. Many students understand that college will be challenging, but they might not fully grasp the level of independence required and the expectations that professors will have. Even a few conversations about the realities of college academics can be impactful and get them ready for the future.

Do you have students who need support with the college journey? Huntington can help whether a student is seeking to raise their grades or prepare for the SAT or ACT. We work with students to ensure they have the study skills and subject-matter knowledge to succeed in high school and are academically and mentally prepared for college.

Refer your college-bound students to us at 1-800 CAN LEARN.

THREE PRACTICAL EXAMPLES OF PROJECT-BASED LEARNING AND WHY THEY WORK

As a teacher, you're always looking for ways to make learning more engaging and meaningful. Project-based learning (PBL) is an approach that puts students at the center, encouraging them to tackle real-world problems and build practical skills they can use throughout their education. According to PBLWorks — previously the Buck Institute for Education, which adapted project-based learning for K-12 education — this teaching method is built around seven design elements:

1. **A challenging problem or question —** Projects should pose a problem or question
2. **Sustained inquiry —** Projects must involve research & inquiry
3. **Real-world relevance and context —** Projects should be authentic and involve real-world impact
4. **Student choice and voice —** Students should have a choice in how to approach projects
5. **Student reflection —** Students should engage in thoughtful reflection throughout projects
6. **Critique and revision —** Students must give and receive feedback and apply critiques to improve their process and work.
7. **A public presentation or product —** Lastly, well-designed project-based learning invites students to present their work to people outside of the classroom

PBL offers powerful benefits to students of all ages by promoting deeper understanding of content. It strengthens students' critical thinking and collaboration skills and helps them see the relevance of what they learn. Best of all, PBL is student-driven. It sparks students' curiosity and boosts their confidence as they tackle complex problems. Although PBL can be resource-intensive and challenging to implement, many simple projects can achieve its goals too.

HERE ARE THREE EXAMPLES of projects that don't require extensive planning or large-scale community involvement:

PBL EXAMPLE #1:

Redesign the School Lunch Menu

Question: How can we improve the school lunch menu to make it healthier, more appealing and better for the environment?

Students analyze menus, conduct student surveys, and research food waste and sustainability in school cafeterias. They compile their research and propose practical menu adjustments to an audience that could influence change (e.g., the school food service director, the principal or a parent council).

HOW IT MEETS PBL CRITERIA:

- It poses a question about the nutritional value, sustainability and appeal of school lunch.
- The question is open-ended and requires students to reflect, research and obtain feedback.
- It involves a topic that students care about.
- It has students present to an audience outside of the classroom.

PBL EXAMPLE #2:

Revise the Morning Routine

Question: How can we change our morning routines to improve productivity and embrace a mindset for optimal learning?

Students assess their morning routines and identify where they are often rushed or stressed, contributing to a rough start to the day. They research good habits and choose new routines to test out for a week at a time. Then they share those weekly results and reflections with the teacher (and solicit suggestions for adjustments and/or other ideas). Students present their research and results with students in a younger grade who may benefit from their insights.

HOW IT MEETS PBL CRITERIA:

- It poses a question/issue that is common for many students and encourages them to research techniques, habits and tools that may work well for them personally.
- The project has students engage in deep inquiry and research about a variety of areas that could make a positive impact on their own lives.
- It has students solicit feedback from their teacher and share what they've learned with younger students.

PBL EXAMPLE #3:

Reimagine the School Space

Question: How can we redesign an area of our school to be more welcoming, functional or better for everyone?

Students choose a classroom, courtyard, hallway or lounge, or other area that they feel could be utilized better. They interview other students to determine how the chosen space could be adapted to better meet students' needs. They combine their findings and share their early ideas with a teacher or relevant school staff to ask for their input on whether proposed changes would improve the space and make it more useful. Then, students present or display their proposals in a common area at school or to school administrators or facilities managers.

HOW IT MEETS PBL CRITERIA:

- Students address a real issue that matters to students and teachers.
- They observe usage patterns, talk to students and staff, and research ways to design a space to promote community and accessibility.
- The project has students choose a space to redesign and focus on problems to address (such as safety or lack of inclusiveness).
- It has students share their ideas with students or staff and present their proposals to staff for further consideration.

PBL units and lessons can be short and simple and still remarkably effective. With good planning, you can design projects that also align with learning standards and build essential skills. Focus on projects that address actual issues and put students in control of their own learning. Whether you're new to project-based learning or exploring new approaches, remember that you don't have to go big to make projects meaningful.

HOW TO ADDRESS LEARNING LOSS EARLY IN THE SCHOOL YEAR

When students start the school year with skill deficits, the signs are clear. Some seem lost in class almost immediately. Others hide their confusion by keeping quiet and pretending to understand what you teach, but they cannot fake their way through homework, which is often incomplete or wrong. Many students also come across as apathetic or even hostile, because they assume that they're in for another frustrating or humiliating school year.

All these things signal that students are missing subject skills and knowledge that they need in their current grade level. This is commonly due to regression — also known as learning loss — which happens when students stop learning for extended periods (like summer break). When a new school year begins, students with learning loss struggle to learn new material that builds upon content that they didn't learn in the first place. Skill gaps widen, and their self-confidence and motivation plummet. Over time, this issue will worsen if left uncorrected.

At this point in the school year, you probably have a good sense of which students are behind. Acting sooner than later is vital. Here's what to do now:

Reach out to the parents. If you haven't already, contact students' parents, and don't wait until parent-teacher conferences in a few weeks. A check-in now will alert parents that you're concerned about their children's progress and kickstart a plan to turn things around before the year is half over. Keep your conversation focused on what you are seeing in the classroom and invite them to share their observations at home and any relevant background about their children's school experience to date. Opening the door for collaboration allows you to work as a team.

> Regression is a serious problem that is hard to address solely in the classroom.

Identify critical gaps. Some skill gaps are difficult if not impossible to work around. With your below-grade-level students, review their tests and homework to identify any foundational skills they are missing that are preventing them from moving forward in a subject or unit. For example, a student who grapples with multi-step math problems may lack certain computation skills or an understanding of place value. The more precisely you determine the issue, the quicker you can help students close any gaps.

Offer scaffolded support options. In a busy classroom of 25 or more students, it isn't always possible to stop and help one or a couple students when they are confused. Have a few options available for students to attempt to self-correct or problem-solve. For example, you might have three choices for students to get help: watch a short video on the skill area (that you have vetted for the unit or topic), ask a classmate to explain how to do something or meet with you after school or class. This builds students' independence while also helping them overcome any challenges.

Build motivation through self-awareness. Frustrated students tend to freeze up, choosing to brush issues aside and ignore any problems. Encourage them to reflect by asking thoughtful questions. With multi-step questions, where does a student get stuck? With concepts a student doesn't understand, are there some parts that make sense and some that do not? When a student has encountered a difficult subject or skill in the past, what did they try to help themselves? This inquiry process might not clear up a student's confusion, but it can help you guide support and remind them that tackling tough subjects and relearning skills requires patience and persistence.

Connect the student to a tutor. Some students may be dealing with challenges that require outside intervention. If they are behind in more than one subject and/or struggling with foundational skills, they are at risk of falling so far behind, it is difficult to catch up. Refer students to Huntington. We frequently partner with teachers and parents to help students with learning loss and other academic issues. Our customized, one-to-one approach means students receive the help they need at the pace that works best for them.

Regression is a serious problem that is hard to address solely in the classroom. Students with cumulative learning loss need consistent, tailored support as early in the school year as possible. Huntington is here to help. With tutoring programs for students of all ages and a proven track record of success guiding students to fulfill their potential, Huntington can help any student get back on the path to academic success.

Parents can reach us at 1-800-CAN LEARN.

We have developed a series of webinars providing tangible solutions to academic struggles that almost every student faces at some point during their school years. Visit us at **www.huntingtonhelps.com/webinars** for the full library of recorded webinars.

Huntington is the nation's tutoring and test prep leader, providing academic programs online and in-center. Its certified teachers provide individualized instruction in phonics, reading, writing, study skills, elementary and middle school math, Algebra through Calculus, Chemistry, and other sciences. It preps for the SAT and ACT, as well as state and standardized exams. Huntington programs develop the skills, confidence, and motivation to help students succeed and meet the needs of Common Core State Standards. Founded in 1977, Huntington's mission is to give every student the best education possible. To learn how Huntington can help your child, call 1-800 CAN LEARN®, or visit our website at www.huntingtonhelps.com.

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