

Better Teaching[®]

Tips & Techniques to Improve Student Achievement

Secondary
EDITION

Northeast USD 246
Making Success Our Business



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Bringing Lessons to Life

Negatives turn positive in 'wild west'

+ -
÷ × Multiply two positive numbers and the result is a positive number. Multiply a positive number by a negative number and the result is a negative number. Most students intuitively understand those rules. But *why*, they ask, is the product of two *negative* numbers a *positive* number? Here is a way to help students understand this basic rule of algebra:

1. **Have students create a videotape** to illustrate the rule. Have them create a western based on a traditional "good guy/bad guy" theme.
2. **Tell them to represent** a small town in the old wild west. Nearby, there are groups of "good guys" (positive numbers) and "bad guys" (negative numbers). At different times, these groups either enter (positive) or leave (negative) the town.
3. **What happens to the town** in each case? Have students brainstorm about each of the four possibilities.

What happens when:

1. **The good guys** (positive) **enter** (positive) the town? Answer: It is **good** (positive) for the town.
 $(+) (+) = +$
2. **The good guys** (positive) **leave** (negative) the town? Answer: It is **bad** (negative) for the town.
 $(+) (-) = -$
3. **The bad guys** (negative) **enter** (positive) the town? Answer: It is **bad** (negative) for the town.
 $(-) (+) = -$
4. **The bad guys** (negative) **leave** (negative) the town? Answer: It is **good** (positive) for the town!
 $(-) (-) = +$

Students will enjoy developing the script for their video. Be sure, however, that they highlight the math concepts and don't just focus on wearing cowboy hats and boots!

Source: Alfred S. Posamentier, *101+ Great Ideas for Introducing Key Concepts in Mathematics*, ISBN: 1-412-92706-4 (Corwin Press, 1-800-233-9936, www.corwinpress.com).

Teaching Thinking Skills

Prepare your students for the workplace—teach them to think



It's hard to imagine, but this year's graduates won't be retiring until 2073! These millennials, as their generation is called, will enter a workplace that requires the ability to adapt to a rapidly changing work environment. In short, since facts will be rapidly changing, they'll need to know how to think.

As critical thinkers, your students will need to know how to solve problems, make decisions, visualize solutions, analyze material and interpret data. They'll need to be life-long learners. Prepare your students to:

- **See relationships.** Often graphic organizers help. Engage these visual kids with technical tools.
- **Think aloud.** Apply problem-solving skills in math class, literature discussions and science labs. As students grapple with "how to" and "what if," encourage them to share their thought processes with other students. Then invite students to add their own variations.
- **Ask questions.** In effect, guide students to take on the role of a teacher. Encourage them to ask each other, not just you. Allow some questions to remain unanswered.
- **Work collaboratively.** Engage students in working as pairs or in groups. Guide them to challenge each other in respectful ways.

Source: Sandra Kerka, "Higher Order Thinking Skills in Vocational Education," ERIC Digest No. 127, <http://ericae.net/edo/ed350487.htm>.

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Differentiated Instruction

Know students' emotional needs



You're expected to teach to the various learning styles of your students.

But do you take emotional needs into account? Some students may:

- **Come from nontraditional families.** Their parents may be working long hours, going through a divorce or adjusting to a new country. These students may be providing child care or working part-time jobs.
- **Be outsiders.** They may not fit the mold of "normal" students at your school. They may be shy or have poor social skills. They may even be teased or bullied.
- **Be facing a trauma.** A break-up with a boyfriend may seem like the end of the world. Failure to make the cheerleading squad may be a tragedy.

But the sobbing sophomore must still master Algebra II. So what do you do? Be alert to signs of emotional problems. Be available to talk. Help students get peer support. Know when to connect students to counseling professionals in your school or district.

Source: Robert L. Wyatt, III and J. Elaine White, *Making Your First Year a Success: A Classroom Guide for Middle and High School Teachers*, ISBN: 1-4129-4957-2 (Corwin Press, 1-800-233-9936, www.corwinpress.com).

Cheating: Part One of a Three-Part Series

Low-tech ways to cheat are still popular

a. — Cheating? In your school?
b. — You can count on it! One
c. — recent survey found that two-thirds of high school students admitted to cheating on tests. And most of them thought that cheating was "no big deal."

Of course, it *is* a big deal. Both those who cheat and those who don't suffer consequences. They earn grades they didn't deserve—or don't get the recognition they earned.

Although it's the high-tech cheating that grabs newspaper headlines, students still engage in plenty of old-fashioned methods.

Here are some of the creative ways that students cheat:

- **The old-fashioned "crib sheet"**—a piece of paper with test answers on it—is still the most popular cheating instrument. But in addition to looking for a piece of paper, check under the brims of baseball

caps, on watchbands, in the barrel of a clear plastic pen or on the face of a watch. Some students even tuck away crib sheets in bags of snack food.

- **Answers written on a tissue.** You would be surprised how much information can be written on a single sheet. And what teacher would question a student who dug out a tissue to cover a cough or a sneeze? Other students etch answers on pieces of gum, which they rewrap and then take out during the test.
- **Other students' papers.** Sometimes students simply look at a classmate's paper. And if a student takes a long, slow walk to your desk during the exam? The student may also be checking out answers to questions 14 and 15.

Source: Gregory Cizek, *Detecting and Preventing Classroom Cheating*, ISBN: 0-761-94655-1 (Corwin Press, 1-800-233-9936, www.corwinpress.com).

Attendance

Use 'bell work' to motivate tardy students



Time yourself. How many minutes into a class period does it take before your students are settled in and engaged in learning?

If you don't want those precious first minutes to go to waste, use "bell work"—activities that engage students the minute they enter your room.

For example:

- **Post four questions** based on the previous day's lesson.
- **Post a mind-bender** activity.
- **Have students complete** a survey or answer a question about a hot topic.
- **Have students enter key terms** or vocabulary words on file cards.

To get into a bell-work routine:

- **Inform students** about your bell-work plan. Explain that when they enter your classroom, they should be ready to learn.
- **Plan bell-work activities** as you plan your lessons. Think of them as warm up exercises.
- **Post them** in a regular place.
- **Consider assigning a student** to take attendance so you can focus on instruction.
- **Plan bell-work activities** so they engage your students in learning but do not create additional grading work for you.

Source: Dr. Fred Jones, "Beginning the New School Year: Bell Work," Education World, www.education-world.com/a_curr/columnists/jones/jones020.shtml.

Homework

Find ways to get out of the grading grind



Does student assessment seem endless? Are you buried under a mountain of papers waiting to be graded?

You're not alone. Here are some tips from an experienced teacher to help you cope:

- **Don't grade every assignment.** Instead, as you review the assignment, have students write notes to you on their papers. "I got it!" "I still don't get this." "Can you go over this again?" Then respond to their comments.
- **Give students a checklist.** Have them check their own work before they submit it. Staple their checklists to their papers.
- **Limit what you're looking for.** Grade only for mastery of a specific skill.

- **Grade papers during class.** As students complete an assignment, have them bring it to your desk for immediate review. Record the grade immediately.
- **Have students write answers** on a separate sheet of paper. Set it up so you can quickly move down the paper as you grade.
- **Use gradebook software** and other tools that help determine percentage grades and keep records.
- **Highlight success.** Students will bask in the glow of items highlighted in yellow when they know that means they have done well.

Source: Angela Powell, "Taking the Hassle Out of Grading," Ms. Powell's Management Ideas for Teachers, www.msipowell.com/grading.html.

Resources



Are your students into all the crime scene investigation shows on TV? You can capitalize on their interest using lesson plans offered on the Court TV website. Its "Forensics in the Classroom" program was developed in collaboration with the National Science Teachers Association. You can find science lessons for middle and high school levels. Designed to conform to state standards, lessons such as The Cafeteria Caper are just what you need to fire up your budding sleuths. Go to www.courtstv.com/forensics%5Fcurriculum.



Remember *Star Wars*? Filmmaker George Lucas has gone above and beyond once more with *edutopia*, a website which features insightful articles on current issues in education, innovative ideas from successful classrooms, grant opportunities and an online community for teachers. Focusing on Lucas' interest in project-based learning, *edutopia* offers ideas that make lessons both relevant and exciting. Go to the George Lucas Educational Foundation website at www.edutopia.org.



Listening and Following Directions

Avoid being the only one asking questions



In most classrooms, the routine is the same: The teacher asks a question. A student answers. The teacher asks another question.

This method is guaranteed to wear teachers out. At the same time, it does not allow students to develop their own thinking and listening skills.

Here are two questioning techniques that involve students in asking, as well as answering, questions:

1. **Homework questions.** Assign students to read a chapter or an article as usual. But then say, "Make up five questions that would test whether someone had read and understood this assignment. Make sure the answers are not just copying a sentence from the text."

In class, have students work in groups. Which questions do they think are the best? Were there any questions they couldn't answer? Was that a problem with the question or a problem with their own reading?

2. **Young journalists.** It's not uncommon to have guests visit classrooms to talk about a particular area of interest. Often, the class ends with the teacher asking, "Does anyone have a question?" Instead, make the questions a focus. For a day or two before the visitor arrives, ask students to research the visitor and the topic. Have them prepare questions that go beyond simple facts.

Source: Jeffrey Glanz, *Teaching 101: Classroom Strategies for the Beginning Teacher*, ISBN: 0-761-93917-2 (Corwin Press, 1-800-233-9936, www.corwinpress.com).

Tell us what you think!

We'd love to hear your ideas on how we might make your *Better Teaching* newsletter even better at helping you improve student achievement.

Which topics would you like to see covered more/less? Are there issues we are not addressing now that you would like to see included?

Other suggestions? We'd like to hear from you. Complete the brief survey online at www.teacher-institute.com/survey, or send your ideas to *The Teacher Institute, Editorial Dept., P.O. Box 397, Fairfax Station, VA 22039*, 1-800-216-3667 (fax), or email betterteaching@teacher-institute.com.

Focus n: Helping At-Risk Students

English Language Learners

Use students' native language when necessary



Should English language learners be taught in English-only or in bilingual classrooms? The debate is ongoing.

Whatever you (and your district) decide, it remains a fact that there will be times when students need to speak in their native language.

Some cases are easy. When you are telling students how to get out of the building in case of a fire, or explaining how to use lab equipment, you may need to use their native language to be sure everyone understands exactly what to do.

Still, students will learn faster if they spend most of their time speaking and listening to English—and not just talking *about* English. One compromise may be to schedule a small period of time when students are not expected to speak English.

If you have a bilingual aide, you might also schedule some after-school time with students. That way, a student who has questions about the content of a lesson can get an answer.

Remember, although there are times when speaking the native language is allowed or necessary, you should always encourage English.

Source: Jerry Jesness, *Teaching English Language Learners K-12*, ISBN: 0-761-93187-2 (Corwin Press, 1-800-233-9936, www.corwinpress.com).

Drop-Out Prevention

Signs indicate potential drop-outs



Students don't usually drop out until high school. But in a recent study of more than 12,000 Philadelphia students, researchers found they could predict as early as sixth grade the students who were most likely to fall off the graduation track.

Trouble is on the horizon if students show these four major signs:

1. **They are failing in math.**
2. **They are failing in English.**
3. **They are in school less than 80 percent of the time.**
4. **Their behavior problems in class lead to out-of-school suspensions.**

These are strong indicators. Seventy-five percent of students with even one of these issues either did not graduate at all or graduated at least a year late.

There is still time to intervene. The key is to help students pull up

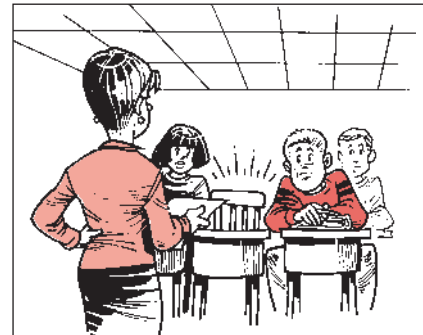


Illustration by Bob George

their math and English grades, improve attendance and adopt positive behaviors in the middle grades. Kids who would have been school failures can then become school successes.

Source: Robert Balfanz et al., "Preventing Student Disengagement and Keeping Students on the Graduation Track in High-Poverty Middle-Grades Schools," Johns Hopkins University, Center for the Social Organization of Schools, www.mgforum.org/News/MembersSpeak/Article-Maclver.pdf.

Motivating Students

Engage students with intrinsic motivation



Think about first graders. They can't wait to get to school. Every day is a new learning adventure for them. What about your students?

Students who are not engaged in learning may be engaged in making life difficult for you. They're disruptive or out of control. At one time, the solution focused on punishment. Today, the emphasis is often on positive rewards—prizes, praise, points, etc. But such *extrinsic motivation* comes from outside the students and is often short-term.

To engage your at-risk students, use *intrinsic motivators*. Build on

their inner needs. What are some of these?

- **Curiosity.** Kids today are used to constant stimulation. Pique their interest and you'll get them engaged.
- **Competence.** Break down what may seem impossible into steps that allow your at-risk students to feel successful.
- **Choices.** Avoid making at-risk students feel coerced. Students are more likely to be engaged if they feel they have some control.

Source: "Re-engaging Students in Learning at School," *Addressing Barriers to Learning*, Winter 2002 (Center for Mental Health in Schools, 1-866-846-4843, <http://smhp.psych.ucla.edu>).