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Time to Study How Parents Can Help With Schoolwork

Getting kids to sit down, focus and learn their schoolwork is an age-old problem. Today, parents face the added challenge of cell phones, portable music devices like iPods, and the many distractions of the World Wide Web. There are so many things that can pull your kids' attention away from what needs to get done for school. How can you help them focus and succeed?

Scientists funded by NIH and other federal agencies are trying to find some answers by studying how kids learn, remember and think. They've discovered that children are more likely to become successful learners when their families actively support them. Reading with your kids, talking with their teachers, participating in school-related activities and helping them with homework all can give kids a tremendous advantage.

"There are many ways parents can help kids study," says Dr. Janet Metcalfe, a psychologist at Columbia University. For instance, Metcalfe's research shows that children in grades 3 and 5 are about as good as college students in recognizing what they know and don't know—an ability called metacognition. But unlike college students, the younger kids often have trouble choosing the right things to study.

"College students usually won't want to study the things they've already mastered, and they won't study the things that are extremely difficult. They'll pick things that are sort of in the middle," says Metcalfe. "That's the best way to learn."

But grade-school kids, when given



an option, often choose to study things they already know. "They say, 'I want to study that. I know that. I like that.' But that won't help them learn," says Metcalfe. "Instead they should study things that are just beyond what they already know. I call it the Goldilocks principle. They need to choose what's not too easy and not too difficult, but just right."

Parents can help by guiding younger kids to focus on concepts and homework that's just beyond what they have already mastered. For instance, if you're using flashcards and a child always gets the 2-times table correct, put those cards aside

for a few days or weeks and focus on problem areas.

Flashcards can also help kids learn in another way. Research shows that most people remember better when they come up with answers themselves—as with flashcards or quizzes—than when they simply read or sit through a lecture. "It's called the

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'generation effect.' Children learn best when they generate answers for themselves," says Metcalfe. "You may be tempted to give kids the answers, but be patient. Wait for them to come up with something on their own, even if it takes a while." She adds that hints are OK if kids are really stuck.



Wise Choices Be a Homework Helper

- **Set a regular time.** Have your child work on homework around the same time each day, but don't wait until just before bedtime.
- **Pick a place.** Find a quiet, well-lit place to do homework.
- **Remove distractions.** Turn off the TV and video games, and discourage making and receiving social phone calls, text messages or online chats.
- **Give feedback.** Praise children when they get answers right, and gently correct them when answers are wrong.
- **Help set priorities.** Help kids identify and study the things they don't quite understand instead of spending time on things they already know.
- **Stay informed.** Talk with your child's teacher if you're concerned about schoolwork.

If children have study sheets with both questions and answers, cover up the answers so they have to come up with solutions on their own. "Otherwise, they can fall into the illusion that they know the material when they really don't," Metcalfe says.

Another effective study technique involves waiting for a few days or weeks between study sessions. Relatively short review sessions that are spaced apart can significantly improve memory and test scores compared to a single, longer review session, many research teams have shown. "You're much better off in the long run to study for about 20 minutes a day for several days than to spend an hour-and-a-half on the last day before the test," says Metcalfe.

One recent study of more than 1,000 students showed that larger gaps between review sessions can lead to better recall of facts for longer periods of time. The research, funded by the U.S. Department of Education, found that the ideal spacing between initial learning and review depends on how long you want to remember the material. For example, if your test is in a week, it might be best to review the information the day after you first learned it. If the test is in a month, study a week after your first learning. Parents should encourage their students to study in smaller doses and not wait until the last minute.

Another way parents can help is to remove distractions during study time. Children may think they can learn and write papers while texting



Web Links

For links to more information about helping children study, see this story online:

<http://newsinhealth.nih.gov/2009/September/feature1.htm>

friends, listening to music, Twittering and playing video games. But the research says otherwise. "Many studies have shown that as you multitask, and the closer in time that you're doing 2 or more tasks, the greater the number of errors you make, and you slow down," says Dr. Jordan Grafman, a neuroscientist at NIH.

Some studies have shown that people can become better at multitasking the more they do it. But these improvements are limited to easy, superficial tasks done so often they become routine. "Any type of deep thinking—creative, inventive thinking—is not likely to come from multitasking," says Grafman.

Grafman and his colleagues used MRI to pinpoint the brain regions important for multitasking. "These include the frontal lobes—one of the most evolved areas of the human brain," Grafman says. "It's also one of the last areas to mature in people—often not until they're in their 20s."

Grafman notes that many of the distracting devices and websites favored by students provide instant enjoyment, which can be hard for kids and even adults to ignore. The rapid-fire feedback they provide may ultimately stunt attention span and focused thinking.

"It's important to have kids engage in activities where they are forced to turn off their devices and interact with each other, to actually have quiet time," says Grafman. "Sit by a river or walk in the woods, but leave the devices at home. This pushes kids to learn how to think about things, and they become engaged. It may be difficult—especially with teenagers—but it's worth the effort." ■

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Time To Let Them Go

Staying in Touch With College-Bound Kids

If you've recently had a child go off to college, you're likely facing a whole new set of worries. Is he getting along with his roommate? Does he like his classes? Is she eating balanced meals in the cafeteria? Is she homesick?

Worrying like this is completely normal, but calling every few hours to check in probably isn't. This time in your child's life is one of great transition. It's important to give your child enough space to do some growing.

"This period of life is when we expect people to develop the confidence to manage their own lives," says Dr. Laurence Steinberg, a professor of psychology at Temple University whose research is funded by NIH. "All parents want their kids to develop smoothly, not make mistakes and avoid harm. The temptation is there to stick your hands in all the time to make sure nothing bad happens."

Steinberg's research suggests that though a child of 18 or 19 may technically be an adult, they have quite a ways to go before achieving mental and emotional maturity. During this critical phase in life, children are developing confidence, a sense of identity, responsibility and independence. For these skills to blossom, some independence from Mom and Dad is necessary.

For parents, this may mean stay-



ing on the sidelines when your child faces a minor emergency. If your student can't figure out what to do if he bought the wrong textbook for a class, he may be in trouble when faced with bigger challenges later. Help him figure out where to get help on campus, rather than solve his problems for him.

Of course, you still want to find ways to stay connected to your child without hindering her growth into an adult. Experts on campuses suggest parents get comfortable with technology, particularly text messaging, email and social media—things a parent may at first find impersonal. Your teen may be more comfortable with this way of communicating.

Dr. Richard Lerner, a child development researcher at Tufts University, says he himself has learned to dispatch short messages when he wants to stay in touch with his 3 kids, now in their 20s. "If you want your kids to communicate with you in the way you want, reach out to them and they will meet you halfway," he says.

But don't be the one to kick off a text messaging flurry. Most of the time, let your child communicate

with you first. "It's better to put the ball in your child's court," Steinberg says.

One way to think of your new role is as a consultant. Ask questions and offer guidance. Steinberg says another way to think of it is you are the senior partner and your child is the junior partner. "You are there to give advice and share expertise, but your child should be the one making the decisions," Steinberg says.

Ultimately, trust in your parenting and the fact that you've prepared your child well for life away from home. ■



Wise Choices If Your Kids Are Off to College

- **Do your own homework.** Find out about the school's resources, so you can guide your child to the right expert on campus if he or she needs help.
- **Hold the phone.** After the initial settling-in phase, let your child set up the frequency of your conversations.
- **Practice restraint.** A student starting a new academic term is extremely busy. If you want to check in, try sending an email or text message. You may get a response more quickly.
- **Take a deep breath.** Don't ramp up the level of panic when your student tells you he lost the keys to his dorm room. Tell him you trust his judgment and let him take care of it.



Web Links

For links to more information about teens, see this story online:

<http://newsinhealth.nih.gov/2009/September/feature2.htm>

Health Capsules

For links to more information about these topics, visit this page online:
<http://newsinhealth.nih.gov/2009/September/capsules.htm>

Human See, Human Do?

Imitation is the sincerest form of flattery, so they say. It may also help form social bonds. A new study reports that monkeys prefer humans who imitate them over those who don't. The finding suggests that mimicking may act as a social glue, helping to bind individuals together.

People sometimes copy the body movements and postures of others without realizing it. Research has shown that people often feel more connected to those who copy them. They may be more likely to help their imitators or even leave them

more generous tips. But it's been unclear if this type of bonding is unique to humans.

To investigate, NIH-funded scientists studied capuchin monkeys, which tend to form strong social groups. Each monkey was given a ball and then paired with 2 human researchers. One investigator mimicked the monkey's behavior by poking, mouthing or pounding the ball when the animal did. The other researcher behaved differently—for example, pounding the ball when the monkey poked it.

The scientists found that the monkeys tended to look longer at the researchers who imitated them. The animals also chose to spend more time with their imitators, and they preferred to engage in a simple task with them instead of with the non-imitators.

The scientists propose that imitation may be an ancient behavior that helped set the stage for primates to form social groups. The research may also shed light on human disorders in which imitation and bonding are impaired, such as certain forms of autism. ■

Drinking Problems and Older Adults

Can drinking problems begin later in life? How do you talk to an older person about his or her drinking? Get answers to these and other questions from *Older Adults and Alcohol: You Can Get Help*, a new booklet from NIH.

This colorful 20-page publication is filled with personal stories, checklists, practical tips and resources. Learn how alcohol interacts with medications, how heavy drinking affects health and how family, friends and caregivers might help if they're concerned about someone's drinking.

To download or order free copies of *Older Adults and Alcohol*, visit www.nia.nih.gov/HealthInformation/Publications/AlcoholBooklet, or call NIH's National Institute on Aging Information Center toll-free at 1-800-222-2225. For bulk orders of 25 booklets or more, visit <http://niapublications.org/bulkorder1.asp>. ■



Wise Choices Get Help for a Drinking Problem

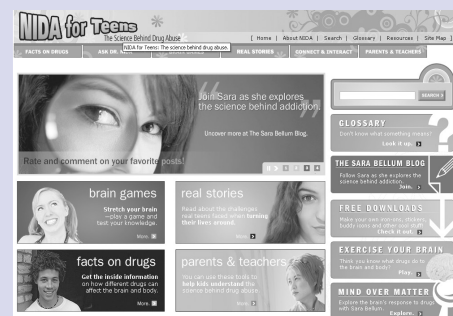
- Find a support group for older adults with alcohol problems.
- Talk to your doctor. Ask about medicines that might help.
- Visit a trained counselor who understands how alcohol problems affect older adults.
- Choose individual, group or family therapy, depending on what works for you.
- Join a 12-step program like Alcoholics Anonymous, which provides support for people who want to quit drinking.



Featured Web Site NIDA for Teens

<http://teens.drugabuse.gov>

Learn how drugs affect the body, and hear from teens who've struggled with addiction. This interactive website has quizzes, videos, games and a blog that show the science behind drug abuse. A section for parents and teachers includes easy-to-read information and lesson plans.



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