## Ending the nightly homework battle

BY DR. ARVIND GUPTA, SPECIAL TO THE VANCOUVER SUN APRIL 23, 2009


According to a 2008 Survey of Canadian Attitudes Toward Learning, 72 per cent of Canadians reported that homework is often a source of household stress.

Photograph by: .., Canwest News Service files

Homework is nearly always a contentious topic - no matter what kind of assignments teachers send home, someone is very likely going to be upset.

Often, the result is conflict and stress for families which have lead to some school districts debating limiting or even banning homework.

According to a 2008 Survey of Canadian Attitudes Toward Learning, 72 per cent of Canadians reported that homework is often a source of household stress.

I would hazard to guess that math homework accounts for a disproportionate amount of that stress, and explains the fact that one in three parents surveyed have hired a math tutor for their child.

However, more than 80 per cent of surveyed parents agreed that doing homework develops good work habits and enhances learning, so I wouldn't think that those rallying cries to ban homework are going to be heeded any time soon.

With the competing demands of school, extra-curricular activities, jobs and family life, homework can easily be neglected or resented. According to a 2005 Statistics survey, Canadian teenaged girls completed an average of 10.3 hours of homework per week with boys completing only 8.1 hours per week. But regardless of how you and your children feel about the time required by homework, the best way that your children can organize those study hours is to make mathematics a top priority.

The key is for you to help your child take ownership of his or her own learning process and to provide the resources and encouragement needed to support this learning.

The bottom line is that math homework is essential, especially for middle school and high school students. If completing math homework is a source of conflict between you and your child, it is time to redraw the battle lines so you and your child are allies in the quest to learn. It's nearly impossible to learn mathematics without doing homework; the best way to master math is through regular practice.

One important consideration for parents is that their own attitude about homework has an effect on that
of their child.

A study completed last year by Dr. Linda Cameron and Dr. Lee Bartel of the Ontario Institute for Studies in Education notes: "There is a very strong positive relationship between parental attitude toward the child's homework and how frequently they help the child." The study also indicated that, "There is also a strong relationship between parental feeling of competence to help with homework and (a) the frequency with which they help the child, (b) how positive they feel the effect of homework is on family relationship, (c) the effect they feel it has on the child's achievement."

Interestingly, the study showed that children's attitudes toward homework start out highly positive, with 85 per cent of kindergarteners "enthusiastic or willingly cooperative." By Grade 4 however, " 61 per cent are very resistant to only grudgingly cooperative."

According to Drs. Cameron and Lee, "This change is related to the time required by homework - more homework correlates with more negative attitude and therefore higher the grade the more negative [the attitude]." They also noted that the more time a child spends watching TV or playing video games, "the more negative the attitude toward homework -- probably due to increased pressure from parents."

If you are able to help your child manage his or her time wisely, staying on top of math homework while maintaining positive personal interactions, that's great. If your own knowledge is limited, or if the tension over homework is running too high, the challenges of parent-child conflicts on top of the challenges of learning math may prove to be too difficult for you and your child to manage alone.

Don't give up - seek help from a knowledgeable friend, relative, or tutor. Check with your child's teacher to see what kind of tutoring or support resources are available through the school, and continue working toward a productive learning environment for your child.

Regardless of your level of technical ability, your attitude toward homework and toward mathematics can still make an important difference to your child's success.

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## Tips for Preventing Math Homework Conflicts

1. Understand why it's important for you to be involved in your child's education, and be there to help him or her. This may give you the extra patience you need.

Vancouver's Gordon Neufeld's "Power to Parent" workshops and bestselling book Hold on to Your Kids explain how parenting and teaching from a place of strong attachment yields great success in learning.

The Northwest Regional Educational Laboratory in Portland performed an extensive review of literature on parent involvement in education. Based on their work, the editors concluded that, "The research overwhelmingly demonstrates that parent involvement in children's learning is positively related to achievement. Further, the research shows that the more intensively parents are involved in their children's learning, the more beneficial are the achievement effects. This holds true for all types of parent involvement in children's learning and for all types and ages of students.... there are strong indications that the most effective forms of parent involvement are those which engage parents in working directly with their children on learning activities in the home. Programs which involve parents in reading with their children, supporting their work on homework assignments, or tutoring them using materials and instructions provided by teachers, show particularly impressive results."
2. Deal with the protests and questions of "Why do I need to learn this?" and have your answers ready! Take a look at the Math Matters columns on March 10 and April 16 for some help.
3. Create the right environment for your child to do his or her homework.

Consider time of day, proximity to mealtime, distractions such as TV or telephones, lighting, and location. Set aside an appropriate workspace, such as a large desk or open table, with plenty of room for books, paper, and other tools. Properly considered, these will help your child with focus. A routine time to complete the work before doing something fun provides further motivation.

Let your child be the one in charge of the math homework - be available to help when needed, but resist the urge to micromanage or to complete your child's work for him. The level of help needed will change with the child's age, but the principle is the same: being in charge empowers your child to feel he has control over his learning rather than be tempted to play the victim of evil teachers and tyrannical parents.
4. Don't assume your way to solve the problem is the way you child has been taught or the way he or she wants to do it. If you are going to present your own ideas, do it after he's had a chance to share his. If you can, clarify any misconceptions your child might have about how to solve something. If he or she doesn't believe you, look for a lesson online (see links below). Your child may believe a stranger's video lesson before yours - don't take it personally.
5. Be sure that your child has phone number or email address of a friend that can be contacted for emergency phone calls such as, "What's the homework?" or "When's the test?"
6. Familiarize yourself with the teacher's expectations, the textbook, and any routines or recommended resources for math homework. And stay in regular contact with your child's teacher, but especially when he's having difficulty. It is a good idea for your child to be aware that you are in touch with his or her teacher, so there aren't any hurt feelings over surprise "invasions" of their privacy.
7. Use online resources for lessons, homework tips, games, and resources

For step-by-step guides and solutions to your problems: http://www.webmath.com/
For video explanations of math problems from a variety of instructors: http://www.mathtv.com/
Resources for Algebra, Geometry, Trigonometry and Calculus students: http://highschoolace.com lace/math.cfm

Ask Doctor Math includes a thoughtful and thorough archive of explanations of questions about mathematics: http://mathforum.org/dr.math/

Hundreds of activities and lessons from Kindergarten through grade 12: http://illuminations.nctm.org/
8. Help your child to persevere when she feels like giving up.

Keep in mind that math challenges are compounded if your child does not have a strong enough foundation in the topics building up to the task at hand. Try to identify if the difficulty is with skills that she should have already mastered. If it is, then your energies are best spent in reviewing. Your child will not be able to move forward if the foundation is not there.
9. Let your child know that you understand their frustration, but don't feed it. Don't say things like, "Oh, I know. I hate math too!" Instead, use constructive sympathy, for example, "I had some trouble in math at times, but I kept trying, and it felt so good after I learned it!" If the situation has escalated to tears your child's or yours - take a break. Once things are this hot, not much concentration or learning can occur.
10. Ask questions to help your child discover his or her own path to solving the problems in question, for example: Is there an example in the book like this? Do you have an example like this in your notes? Can you do some easier problems and go back to this one after? What part of the problem is giving you trouble? Let's read the problem together and make sure we understand what it is asking.

Can we draw a picture of the problem? Can we make up an easier problem that is similar to this? Then we can work our way up to this one. What did your teacher say about this assignment? Why don't we
take a 10-minute break and come back to it?
11. If you are at a standstill and the preservation of your parent-child relationship is at risk, consider finding outside help. Find a relative or family friend to help your child once a week. Your sister-in-law may be just the right person to help your daughter prepare for a quiz! Check to see if the school has a homework resource room outside of class time. Ask your child's teacher or school counselor for the name of a recommended tutor. When looking for a tutor, seek someone who is knowledgeable and qualified in the subject at hand, and who will get along well with your child.
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