

# PARTNERSHIP PAGE

Thoughts and facts about learning, parenting, and working together for the Christian education of your children.

## What is **Productive Disposition?**



The inclination to see mathematics as sensible, useful, and worthwhile, to believe that steady effort in learning pays, and to see oneself as an effective learner and doer of mathematics. (See \*\* below)

It is important for students to see the significance of their work. We are surrounded by a world filled with mathematics, and therefore, it is crucial that students consider the time and practice spent on understanding math as an important part of their lives. Students should be encouraged to try their hardest and never give up.

At Clover Christian School, our teachers create many types of math lessons to help build your child's understanding of and confidence in math. Students work together in groups, use manipulatives, and talk about real-life applications of mathematics. Kids are allowed to explain things to each other because sometimes a child can more easily understand a math concept when it is at first explained by his/her peers.

You can help build a productive disposition toward math too!

Watch for fun everyday math applications at home in your family life and explain them to your child. Can you help them observe you using math in your daily work at home or on the job?

Help your child study their math facts but not just as an end in itself; rather, explain to them that getting math facts put away into their long-term memory will free up their working brain, help them feel confident, and open the door to some really cool math projects later on.

Monitor your own attitude about math. Many of us did not get off to a confident start in math as children, and by the time we got to high school and college, we were avoiding math like the plague. Good thing for us, it's never too late to learn! Sit down and ask your child to explain what they are doing on their math paper to you. See if you can teach yourself a different method of adding or subtracting to challenge your brain. Have an open mind about new methods of math computation. Teachers introduce alternate methods because we now know that kids learn and understand math differently. New methods also build a deep understanding of numbers, rather than just learning the "formula," without knowing why it's used, as many of us did.

Encourage your child. Math does not come easily for every child, but every child can learn. It might be hard work, but hard things are usually worth doing. Celebrate little understandings along the way!

Finally, the term productive disposition was used in talking about *mathematics* in the academic paper cited below, but one can certainly see possible applications in other subject areas, such as reading, and spelling, grammar, and science. Parents, let's see if we can all work together to build this favorable attitude toward all subjects in your children/our students!

\*\*Adapted from National Research Council. (2001). Adding it up: Helping children learn mathematics.



## **Five Things You Need to Know About Childhood Diabetes**

Insights from Pediatric Endocrinologist Mary Pat Gallagher, Pediatric Diabetes Center
[Excerpt]

Diabetes is a growing epidemic among children and adolescents, affecting an estimated 208,000 youngsters in the United States. Characterized by high levels of glucose in the blood, diabetes results from the body's inability to produce or respond to insulin, a hormone that controls blood sugar. If not properly controlled, the condition can lead to severe complications—from cardiovascular problems to blindness to kidney failure. Dr. Gallagher shares her insights on preventing, diagnosing, and treating this complex disease.

#### 1. Adult-Onset Diabetes Isn't Just for Grownups

Not long ago, the two most common forms of diabetes were primarily defined by their age of onset. Type 1 diabetes was known as juvenile diabetes because it typically emerged in childhood. Type 2 diabetes was called adult-onset diabetes because it rarely affected people under 20. In fact, type 1 diabetes can be diagnosed at any age, and type 2 is increasingly seen in very young adolescents. Type 1 occurs when the immune system mistakenly attacks insulin-producing cells in the pancreas, which can occur as early as infancy. Type 2 develops when the body is resistant to insulin, and the insulin-producing cells are unable to compensate. The prevalence of type 2 in children soared by 30 percent from 2001 to 2009. But there is some good news: more recent data suggests that the surge is leveling off.

## 2. Obesity Isn't the Whole Story

Rates of type 1 diabetes in children have also risen over the past two decades, though the reasons remain unknown. "There may be some environmental factor that triggers the immune system," Dr. Gallagher suggests. "It could be exposure to certain chemicals, foods, or viruses—or a *lack* of exposure to different infections.

Researchers are investigating all of those possibilities." What's clear, however, is that **genes play a key role in all forms of diabetes**. About 80 percent of children diagnosed with type 2 have at least one parent with the disease.

## 3. Diagnosing Which Type of Diabetes a Child Has Can Be Tricky

Type 1 diabetes is often diagnosed after a patient develops ketoacidosis, a dangerous condition caused by a severe insulin deficiency. Symptoms include extreme thirst, frequent urination, vomiting, and fruity-smelling breath. In addition to high glucose and low insulin levels, most often a blood test will show evidence of an autoimmune reaction to confirm the cause. By contrast, type 2 may go unnoticed until a child has a routine checkup, and a hemoglobin A1C test detects persistently high levels of blood sugar. Check-ups are vital!

## 4. Treating Type 2 Diabetes in Young People Can Be Challenging

Type 1 is by far the most common form in youngsters, and it can usually be controlled by administering insulin. "These children are healthy," Dr. Gallagher explains. "They can play sports and eat ice cream just like their peers." Treating young people with type 2, however, is a different story. Although insulin and medication can help control blood sugar levels, neither will work without lifestyle changes. We "work with the whole family to help them make healthy changes."



#### 5. Childhood Diabetes Can Be Just as Hard on Parents

Constantly monitoring a child's glucose levels and medications can feel overwhelming, and anxiety over possible complications may add to the burden. "I emphasize to parents that they shouldn't feel guilty because they didn't cause their child's condition," Dr. Gallagher says. Instead, she and her colleagues try to increase parents'—and children's—sense of confidence and control. "This is a marathon, not a sprint," she reminds them. "It's hard work, but they can make it."