What would you think if your child came home with the exciting news that he or she had decided to become a really creative inventor? “Mom (or Dad), our teacher gave us all kinds of material about finding problems that a new invention might solve, and we all have a very specific time line for our projects. We’ve been practicing some really neat inventing activities, and my teacher told us that everyone in our class should be able to come up with our own invention. But I have to do all the work by myself.”

You don’t want to dispel that confidence and enthusiasm for this new adventure, but you are not really certain how you might be able to give your child the appropriate support and help she or he might really need with this task. Perhaps your first response is to panic, as you say to yourself, “I certainly don’t know how to invent anything, and I don’t think my child does, either!” Then you start searching your memory for all the inventors you have ever heard about. Aren’t they weird old guys with wild hair whose lab coats aren’t buttoned right? Relax! As Christopher Columbus is reputed to have said, “Anything is easy once somebody tells you how.” Let’s look at some tips to help your budding young inventor.

Inventions are ideas, products, or processes that solve real or perceived problems. One of the first things you can do is to share with your child any specific problems or concerns that you might have about any daily activity, such as reaching a light in an out of the way place, cleaning ceiling lights, animal care, or keeping things organized in a certain area of the house. Don’t offer to chose and solve a problem for your child. Help your child create a list of possible problems that might be “starting points” for creating new inventions. I once worked with a kindergarten child who invented a wall-mounted body dryer. This product prototype was a series of hairdryers affixed to the outside of a large cardboard box. His problem came from the time he had chicken pox and he couldn’t use a towel to rub him dry so his mom used her hair dryer. His idea was that a wall dryer would have been helpful then, and the warm air of the hair dryer felt so nice that many people might like the idea, too—even if they didn’t have chicken pox!

Every time someone says, “I wish…,” try following that statement with…“…someone would invent something that helps…” and think about where it might lead! You might help older children find some starting points for inventing by taking them to your workplace, and asking your fellow workers what types of tasks they perform and what problems they encounter.

If your child comes up with an idea for an invention that you realize already exists as a product, do tell her or him about it. It can be disheartening to
children to discover that they didn’t really originate “their” idea after they’ve already put a great deal of effort into working on it. If you let them know early in the process, you might be able to look at the product, discuss how it solved a particular problem, and think about ways to improve it or other ways to solve the same problem.

Once an idea takes hold for a child, you can help by guiding his or her thinking about the types of materials or tools that might be necessary and helpful. A shopping trip to a store that has a variety of cloth, magnets, pipes, switches, or other kinds of “raw materials” can also be an important way to offer assistance. Helping your child learn how to use some specific tools can be another way to help. Who do you know who can sew, weld, wire, or mold? How might you help your child contact such a person, or arrange a visit, so they can discuss the idea and needs?

Students usually need to record and document their process and progress as part of an invention log. This documentation is necessary, for example, in order to determine originality and verify what work an inventor has done and when it was carried out. You might help your child provide photographs, video tape, or a written record of steps taken, and then sign it with the child to authenticate the date of the work.

After your child has completed his or her invention, being a “quality assurance tester” is another (if sometimes risky) way to help. Offer to do a test of the invention yourself, or to find professionals who can offer advice about how they might use the invention and provide feedback about whether it really helps them do the job or function better, easier, more efficiently, or more enjoyably. Don’t just say, “That won’t work,” or pick out one flaw after another. Look for positives, raise questions, and encourage the young inventor to conduct tests and get feedback from others. Next, although it might sound trivial, let’s not overlook the fact that transporting the invention to school can also be a very important contribution with which parents can help. All too often, students arrive on the scene with bits and pieces of a very treasured object!

What if someone tells you that your child’s invention is potentially patentable? Look into it, but don’t get too excited too quickly, and be careful to do some checking about agencies that offer to help inventors patent and sell their inventions (for a fee). It is important to help your child understand the process—and its economics. Some patent attorneys will review an invention, and perhaps even do a patent search for a student, at no or very low cost. There are also Inventors’ Clubs or Associations in many areas, where you might find helpful advice and support. Many children have received patents and some of their inventions have even been produced and marketed, but obtaining a patent can be quite costly, and there is no guarantee of great rewards or commercial success. Don’t expect that the child’s invention will guarantee riches or fame, or support early retirement for your child (or you). If you do locate a source of advice and assistance, you can help your child in making and keeping an appointment, and even if you do not pursue a patent, the very process of looking into it may sustain their enthusiasm for the process of inventing.

Perhaps the most important way of all to provide support is to remember that an inventing activity is an opportunity for your child to learn many new skills, to be a problem solver, and to become more of an expert about a particular topic. Keep in mind that it is an opportunity that stresses creativity, not an opportunity to create stress. Sit back, be there when needed, enjoy the process, and help your child to enjoy it, too. These lessons might also eventually influence the path your child will follow in future studies or in career choices.

Here are a few brief stories about this year’s Young Inventors and Creators Winners, who were recognized at the NAGC convention in Atlanta. The Young Inventors and Creators competition recognizes students in eight areas of invention and eight areas of copyright creation in grades 6 through 12.

Daniel Reed (GA), was a double winner. His musical composition, “Things Red” along with his computer program, “The Graviatator” had judges from several states exclaiming about his talent and ability. Rotating Solar panels, a filter for motor boat engines, and a chair for sitting on hillsides—invented by Alex Wissner-Gross (NY), Virginia Sweeney (CT), and Joel Ahrendsen (IA), respectively—were also exciting examples of successful inventions by young people. A team of students, Dan Magly, Dominique Smith, Annie Wessel, and Vanessa Grace from Cincinnati, developed an animal repellant paint for road markings in an attempt to reduce road kill and accidents. The students participating in this program were nominated either by their school or by their parents—so keep looking for opportunities to encourage your child’s interest in inventing and to reinforce his or her efforts; the results will be exciting and worthwhile.

Recommended Resources
An excellent website to visit is www.Patentcafe.com. It is a very comprehensive site, and contains links to many other useful sites on inventing and inventions. Also, visit the Patent and Trademark Office website (www.uspto.gov) and go to the Kids’ Pages link.

Michele Munson has been the chairperson of the Connecticut Invention Convention for fifteen years, the Chair of the Young Inventors and Creators Program for six years, and has written and presented on inventing with children. She is currently the Director of Elementary Curriculum in SAU 21 in Hampton, New Hampshire.