What causes some gifted students, who seem capable of truly outstanding performance, not to realize their potential? What can we do to reverse a pattern of underachievement?

Achievement-oriented students feel that school is meaningful, believe they have the skills to be successful, and expect to succeed in their environment. Positive attitudes in each of these areas produce self-regulated learners who set realistic expectations for their own academic success. Our goal as parents and educators is to help students move along the path to being self-regulated learners.

Underachievement is often attributable to undiagnosed learning problems. The gifted student is able to disguise learning difficulties better than average students can, which may lead to less frequent diagnoses. In addition, gifted children with learning disabilities may become defensive about their problem areas and avoid work that feels too difficult. Therefore, it is important that a student exhibiting underachievement behaviors should be assessed to determine if a learning disability is present. A thorough assessment will provide information about a student’s strengths and weaknesses and will give parents and teachers the information they need to structure the school and home environment to benefit the student.

If a student is showing signs of underachievement, these are some of the other strategies that parents and educators can use:

Encourage the student’s interests and passions. Ensure that he or she is challenged (but not frustrated) by classroom activities.

Help the student to set short and long-term academic goals. These goals should be meaningful to him/her.

Praise, but not too much! Over-praising teaches kids to be too competitive or perfectionistic. Praising kids too often makes them feel inadequate when they aren’t being praised.

(Continued on page 4)
Thanks to the ESTS Test Centers!

We would like to thank all of the schools that participated in the Elementary Student Talent Search this year by sharing information about our testing program with their students. Students in grades 3-6 took the EXPLORE test in January and February of this year at 60 test sites in 26 Pennsylvania counties. We would especially like to thank the following schools for allowing us to use their facilities for testing:

Aquinas Academy (Greensburg)  McDowell High School (Erie)  Westmont Hilltop Elementary School (Johnstown)
Berwick Middle School (Berwick)  Moon Area Middle School (Moon Township)  Wexford Elementary School (Wexford)
Blessed Sacrament School (Erie)  New Castle Christian Academy (New Castle)  The Wyndcroft School (Pottstown)
Campus School of Carlow University (Pittsburgh)  New Covenant Christian School (Lebanon)  Wyoming Seminary Lower School (Forty Fort)
Candlebrook Elem. School (King of Prussia)  North American Martyrs School (Monroeville)  
Carnegie Mellon University (Pittsburgh)  Penn View Christian Academy (Butler)
Centre County Christian Academy (Bellefonte)  Penn-Mont Academy (Hollidaysburg)
C. F. Patton Middle School (Kennett Square)  Pocono Elementary Center (Tannersville)
Cumberland Valley High School (Mechanicsburg)  Sacred Heart Elementary School (Pittsburgh)
Delahunty Middle School (Hermitage)  Saint Frances Cabrini School (Fairless Hills)
East Union Intermediate Center (Russellton)  Saint Luke School (Erie)
Eden Christian Academy (Pittsburgh)  Saint Philip School (Pittsburgh)
The Ellis School (Pittsburgh)  Saints Peter and Paul School (Beaver)
Fairfield Academy (Montoursville)  Scranton High School (Scranton)
Fort Allen Elementary School (Greensburg)  South Allegheny Elementary School (Port Vue)
Glenside Elementary School (Glenside)  South Lebanon Elementary School (Lebanon)
Glenwood Elementary School (Media)  Southern Middle School (Reading)
Harrisburg Area Community College (Harrisburg)  Torah Academy of Greater Philadelphia (Ardmore)
Hillel Academy (Pittsburgh)  Transfiguration School (Russellton)
Holy Child Catholic School (Bridgeville)  Trinity High School (Washington)
Indian Valley Middle School (Harleysville)  United Hebrew Institute (Kingston)
Linnitown Elementary School (Lewisburg)  United High School (Armagh)
Linton Middle School (Pittsburgh)  Valley School of Ligonier (Ligonier)
Marshall Middle School (Wexford)  Waynesburg Central Elementary School (Waynesburg)
Thank You for Your Generous Support

Foundations and Corporate Sponsors

C-MITES has received multi-year grants from Dr. Bernard Meisner, Mr. Mark Gelfand and from the Grable Foundation. We are most grateful for their generous support. Their support has provided scholarships for our students as well as operational costs for our Summer Program, Weekend Workshops, August Steppingstones classes, and our Elementary Student Talent Search testing program.

Thank you so much!

Student Contributions

Have you written a short story or poem you would like to share with other C-MITES students? Do you have a favorite puzzle or brain teaser you would like our readers to try to solve? Have you always wanted to be published? Well, here’s your chance! C-MITES is accepting student contributions for our newsletter.

We are looking for original work by our students, including, but not limited to, poetry, short stories, mind benders, brain teasers or puzzles. To be considered for the next issue of The C-MITES NEWS, submissions must reach our office by May 1, 2008. Submissions are best sent in a Word document or in the body of an email. Emails of your work should be sent to Ray Budd at budd@andrew.cmu.edu. If you do not have access to a computer, you may mail a hard copy to:

Ray Budd, Publications Coordinator
C-MITES, Carnegie Mellon University
5136 Margaret Morrison St., MMP30
Pittsburgh, PA, 15213

Any work submitted is subject to the approval of the editor and must include contact information for the person submitting the work. We reserve the right to reject any submissions that are inappropriate for our readers.

A Student Contribution . . .

The Shore
by Carmen Condeluci
an eighth grade student at David E. Williams Middle School

On June 6th of Forty-four,
Boats set course to take the shore.
In these boats, our soldiers wait,
Like horses waiting at the gate.
The beach now comes into view,
Cones, barricades, and slanted poles too.
Their landing crafts stuck on a sand bar,
And the shore is still too far.
German machineguns atop the cliffs,
Begin to roar loudly—but if,
They can make it to shore,
We might have a chance of winning this war.

Our brave soldiers go underwater,
To avoid the impending slaughter.
They get to shore, but only to find,
The need to run for their lives to save mankind.

To hide under the cliffs they run,
But all they can hear are the machineguns.
Looking back to the ocean, what do they see,
Their friends, swimming in the sea.

This was the second wave of brave men,
Approaching the beach—but then,
Unscathed machineguns saw them land there,
And slaughtered them while they were unaware.

Though their friends were now dead,
They turned their attention to the cliffs ahead.
Grappling hooks flew to the top of the wall,
And the race began to finish it all.

Up the cliffs the soldiers went,
Pushing upwards with eager intent,
To get away from the shore where they landed,
Where their friends were left stranded.

When the soldiers got to the top of the wall,
What they saw struck them with awe.
They saw a system of trenches miles long,
And mines in places where they were known to belong.

Our soldiers began clearing the trenches with all of their power,
The repeated attacks they made lasted for hours.
German bunkers were the next things to be cleared,
They continued until the support planes appeared.

By that afternoon, the plateau was clear,
Our soldiers gave out a mighty cheer.
The date our men had entered the fray:
June 6th, 1944, Omaha, D-Day.

Davidson Fellow Scholarships

Davidson Institute Seeks Extraordinary Achievers to Receive $50,000, $25,000, and $10,000 Scholarships

Applications for the 2008 Davidson Fellows scholarships are available online. Young people, under the age of 18, have the opportunity to win a $50,000, $25,000 or $10,000 scholarship in recognition of a significant piece of work in the categories of Science, Technology, Mathematics, Music, Literature and Philosophy, or a project that represents out of the box thinking. The application deadline is March 26, 2008.
Use words like smart, hardworking, and thoughtful rather than brilliant, genius, perfect, or gorgeous. Encourage your children to always do their best by telling them that the harder they work, the smarter they’ll get and the smarter they are, the harder they’ll work. Our goal is to get rid of the myth that things will be easy if you’re smart.

Work on developing self-confidence. Students need the opportunity to recognize their growth in specific areas. Teachers should give students an opportunity to revise their work. This helps the students to see assignments as part of a learning process. Gathering student work in a portfolio helps them to document their growth over time.

Attribute failure to a poor choice of learning strategies or a lack of effort rather than to a lack of ability.

Don’t give your kids too much power. Since they have such advanced vocabularies and can carry on conversations with adults at a young age, it’s easy for adults to treat young gifted children like miniature adults. Giving them too much power in making decisions at too young of an age actually causes them to be insecure. Expanding opportunities for power and choices as they mature causes them to feel appropriately empowered rather than overprotected.

Help students to recognize the skills they have developed. Make your feedback specific and genuine (“You really know your five times tables” rather than “Fabulous job!”).

Teachers should avoid providing unsolicited help and too much praise after completing an easy task.

Help students understand that their abilities are not strictly innate by drawing attention to the skill and its development. “Look at how well you’ve learned your five times tables.” This includes the word “learned,” which helps the student to see this is a skill that is developed. It also implies that future skills can be acquired.

Teach study skills. Many gifted students glide through the first years of school without being challenged, and they do not develop study skills such as note taking. Provide adequate challenge and teach study skills as they are needed to work through those challenges. Encourage a regular study time in a quiet place. Don’t do the students’ homework for them!

Specific things that will help students get organized and thus enhance their study skills include using timers or stopwatches to measure how much time is left on an activity and keeping appointment books or assignment books.

Adults in the child’s life should model a pursuit of excellence and acceptance of their mistakes, rather than perfection. Gifted students themselves should not be expected to be 100% correct all the time.

Help students plan tasks: this teaches them that a big job can be broken down into smaller, more doable jobs. Sometimes, the hardest step is deciding how to begin.

Avoid nagging. Use lists and consequences. Calmly and consistently enforce those consequences.

Be patient! Underachievement is complex. It’s often very entrenched in a student’s behavior and it can be difficult to change.

Resources

Mahoney, A. S. (2007, Spring). What the teacher and parent can do: A few practical ideas for helping the gifted and talented underachiever. PAGE Update.


Fun Classes for Bright Kids in Ardmore, PA!

This past fall students in first through eighth grade participated in C-MITES Weekend Workshop classes at Lower Merion High School. C-MITES offered 16 classes, and 303 students attended. Students investigated a crime scene, performed fun science experiments, launched rockets, traded stocks, built robots, experienced the magic and science of Harry Potter and went on a space mission all in one day. Their adventures were challenging, hands-on, and FUN! We thank all of the students, teachers, teaching assistants, and volunteers for participating in this fun day! This spring we are planning another action packed Saturday in May at Lower Merion High School. We will keep you posted as the plans for these classes develop!
Teacher Feature

The teacher featured in this issue of the C-MITES Newsletter began her involvement with the program in the summer of 2003. Mrs. Carole Wojciechowski began teaching Explorations in Science that year. Now, five years later, Mrs. Wojciechowski has developed, revised, and rewritten numerous courses to make them more enjoyable for all of her students.

Over the years, Carole has taught the following courses and workshops: Explorations in Science, Physics Feat, Crazy Coasters, Physics is Phun, Super Soapy Science, Super Sleuths, Solve a Murder Mystery, Forensic Science, and CSI: Pittsburgh. All of her courses are hands-on and packed with activities that get her students interested in learning science.

In Carole’s summer class, Forensic Science, students learn chromatography, fingerprinting, hair analysis, and blood analysis. Then they apply what they have learned to the task of solving a variety of crimes. A drug bust, kidnapping, and murder are the highlights of this course along with meeting a real Pittsburgh K-9 team!

Teachers and assistants who worked with Carole commented on her dedication, enthusiasm and passion for teaching science. She is truly an outstanding C-MITES teacher and we are very thankful to have Carole as an instructor in our program.

Carole graduated from Indiana University of Pennsylvania and has a BS in Elementary Education with a minor in Science. She also has certificates in Educational Technology and Middle School Science. Her hobbies include gardening, reading, sewing and quilting. She has three children ages 29, 27 and 25.

Carole’s true passion is science. In her words, “I love my job/career. There is nothing better than watching children discover the wonder of science. Science is FUN and learning should be too.”

We are very lucky to have Mrs. Wojciechowski as a teacher in our program. She is an excellent teacher and a wonderful friend!

KUDOS to Ramaa!

We would like to send out a very special “thank you” to Ramaa Nathan for her hard work and dedication to the C-MITES Weekend Workshops in Ardmore. Ramaa was instrumental in securing the site for the classes at Lower Merion High School and in helping us to find excellent instructors from the area.

Ramaa has been the #1 supporter of the Lower Merion C-MITES Weekend Workshops. She secures the site, makes sure everything is open and in good working order when the teachers arrive, coordinates the volunteers, oversees the registration process, and takes care of all of the last-minute details that are necessary to making the program run smoothly and successfully.

Next time your family travels to Lower Merion High School to take a C-MITES class, please say “hello” and “thank you” to Ramaa for her wonderful work!

“I have been meaning to email you for some time, since you were here in Lower Merion, to say THANK YOU!!!! My daughter adored Funky Science, absolutely adored it. When she came home she was SO happy and couldn’t stop talking about everything she had done and seen while there. The instructor was apparently fabulous!”

— Parent of a Student in Funky Science
C-MITES Summer Program

As we’re writing this issue of the newsletter, we’re gearing up for summer. Once again, C-MITES is planning one- and two-week summer programs at many different locations throughout Pennsylvania for academically talented students in mathematics, science, and humanities. The tentative 2008 locations include: Abington/Philadelphia Area, Erie, Greensburg, Harleysville, Pittsburgh, Pottstown, Sidman/Johnstown Area, Washington and Wexford. C-MITES courses offer students a hands-on approach to math, science, and humanities.

C-MITES summer courses include: Advertising Edge, Amusement Park Physics, CO2 Dragsters, Explorations in Science, Food Science, Forensics Science, Geo-Pardy!, Harry Potter’s Science Adventure, Informal Geometry, Green Engineering, Programming Using Alice, Roaming Ancient Rome, Robotics Programming and Design, Solar System Astronomy, Solve a Murder Mystery, and Structures. Most classes are offered weekdays from 9 a.m. – 12 noon, although some classes are full day. Some sites offer optional afternoon programs.

Scholarships are available, based on financial need. Classes are offered for students who have completed 3rd through 9th grades. The cost of the program ranges from $175 - $450. The application deadline is April 4, 2008. Selection is competitive.

For more details about the locations, times, and classes offered, visit www.cmu.edu/cmites or contact the C-MITES office for a brochure at cmites@cmu.edu or (412) 268–1629.

Class Feature: Kitchen Science Wakes Up Those Taste Buds!

One of the most popular classes C-MITES offers is the Kitchen Science Weekend Workshop. Kathleen Trehy developed the class and teaches it frequently. When we visited the class last fall, we observed the students learning about food and the chemical science of food. Their favorite experiment was making fireworks on a plate! To do this, students used food coloring to watch detergent molecules “gobble up” fat molecules.

Kathleen said, “I love to teach the students brand new information about something that they use everyday - food! Then, I enjoy seeing that they can connect some of the challenging new information to things that they know already.”

In Kitchen Science, the students worked in groups to complete four experiments and learn the science explaining them. For example, most students have already done the baking soda and vinegar trick. In Kitchen Science, the students learned exactly what was happening to make that chemical change.

For those of you who are really intrigued by the idea of a Kitchen Science class, Kathleen has been busy developing a Kitchen Science 2 Weekend Workshop. You might also consider looking into the C-MITES summer course, Food Science. In that class, she leads students through the kitchen, garden and grocery store to discover some of the bittersweet truths about the foods we eat. Activities include studying the chemical makeup of each nutrient, baking protein puffs, and making ice cream. Grab your lab coats and spoons!

Cogito

www.cogito.org is an exciting new website developed by a team of experts at the Center for Talented Youth at Johns Hopkins University. Cogito, which means “I think” in Latin, is developed especially for young scientists and mathematicians. Students can read news and features on topics including global warming, bioethics, computer animation, and science fiction. Great resources are available, including book reviews, “Best of the Web” guides, and educational opportunities, including summer programs, internships, and competitions. This website is for students ages 11 and up and includes an online community for exceptionally talented youth.

This wonderful new project was inspired and funded by the John Templeton Foundation. The Center for Talented Youth has partnered with C-MITES at Carnegie Mellon University and other organizations specializing in working with academically talented youth to develop this one-of-a-kind resource.
Order your C-MITES apparel today!

Order your very own tie-dye C-MITES t-shirt and be the envy of all your friends! Simply fill out the order form to the right and return it to our office with your check made payable to “Carnegie Mellon University.”

* The C-MITES tie-dye t-shirt is green with white lettering saying “Carnegie Mellon C-MITES.” Cost is $17.

* Proceeds from these sales go to the C-MITES scholarship fund.

Make check payable to Carnegie Mellon University

Send to:
C-MITES
5136 Margaret Morrison St., MMP30
Carnegie Mellon University
Pittsburgh, PA 15213

Developing Mathematical Talent:
A Guide for Challenging and Educating Gifted Students
By Dr. Susan Assouline & Dr. Ann Lupkowski-Shoplik

This multi-faceted handbook integrates the unique roles of teachers and parents in the education of mathematically talented youth in elementary and middle school. The regular curriculum is inappropriate for most talented youth, and the authors provide a means of identifying the needs of such students and matching the curriculum to those needs. Throughout the book, issues concerning advocacy, identification, curriculum, and programming are addressed. The heart of the book is the description of the individualized Diagnostic Testing—Prescriptive Instruction model, which systematically matches the level and pace of instruction to the abilities and achievements of each student. After reading Developing Mathematical Talent, you will know how to help the gifted student who is bored to tears in math class. (Order below).

T-shirts Quantity:

- youth size M
- adult size S
- youth size L
- adult size M
- adult size XL

Name: _______________________________
Address: _____________________________
City: ____________ State: _____ Zip: ______
Telephone: ____________________________

T-shirts Quantity:

Number of t-shirts X $17 =_____________
Number of books X $30.95 =_____________
TOTAL ENCLOSED =_____________
(Shipping & handling included in prices)
Your Child’s Name on a C-MITES T-Shirt

Surprise your child! Have your family name listed on the C-MITES 2008 Summer Program t-shirt! For a $100 donation, we will list your name as a “Friend of C-MITES” on the back of the t-shirt. You might list your child’s name or your family name (for example, The Smith Family).

You could also have your company’s logo included on the back of the t-shirt. The cost of the logo is $1,000. Logos will be approximately 6” to 8” wide and several logos will be displayed on the shirt. Logos should be sent in a jpeg, pdf or Photoshop file to the C-MITES email address, cmites@cmu.edu.

Donations must be received by March 1, 2008. Donations are tax-deductible. Make checks payable to Carnegie Mellon University. Thank you for considering this!

C-MITES reserves the right to limit advertisements on our t-shirts.

Name: _____________________________________________________

Address: ___________________________________________________

City, State, Zip: ______________________________________________

Telephone number: ___________________________________________

____$100 enclosed. Name as we would like it to appear on the t-shirt (please limit to 25 characters and print clearly): _________________________________________________

____$1,000 enclosed. Company name to be included in the logo: _______________________

Email the logo to cmites@cmu.edu in a jpeg, pdf or photoshop format.

____$25 donation. Name as you would like it to appear on the ‘thank you’ page of our newsletter:

___________________________________________________________

____$50 donation. Name as you would like it to appear on the ‘thank you’ page of our newsletter:

___________________________________________________________

____other donation enclosed: ________________________________ C-MITES welcomes donations such as grocery store or craft store gift certificates to be used for purchasing classroom supplies.

Thank you!