Davidson Institute eNews-Update

"Supporting our Nation's Brightest Young People"

September 2014

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What's New in Gifted Education



Announcing the 2014 Davidson Fellows

Meet the <u>2014 Davidson Fellows</u>! Davidson Fellows have completed graduate-level projects or portfolios that have the potential to benefit society. Each will receive a scholarship and be recognized for their achievements at a special awards reception, sponsored by U.S. Senators Harry Reid (NV) and Chuck Grassley (IA), in Washington, D.C.

2015 Davidson Fellows Scholarship Applications

The Davidson Institute offers \$10,000, \$25,000 and \$50,000 scholarships to students whose projects have the potential to benefit society, and are equivalent to college graduate level with a depth of knowledge in a particular area of study. <u>Category requirements</u> for the 2015 <u>Davidson Fellows</u> scholarships are now available.

New Book from Dr. Jim Delisle Now Available

At a time when the U.S. education system consistently lags behind its international peers, Dr. Jim Delisle's new book, *Dumbing Down America*, shows exactly why America can't keep up by providing a critical look at the nation's schools through the eyes of the children whose minds are languishing in countless classrooms. Filled with specific examples of how gifted children are being shortchanged by a nation that believes smart kids will succeed on their own, the book packs a powerful message: If we want our nation to prosper, we must pay attention to its most intelligent youth. Now available, order it today!

New Home for Education Program for Gifted Youth (EPGY)

GiftedandTalented.com is the new home of Stanford University Education Program for

<u>Gifted Youth (EPGY)</u>. Guided by ongoing research at Stanford University, this website provides educational tools to help advanced students and those seeking academic excellence achieve their greatest potential. The online K-12 courses in math, language arts, science and computer programming feature a combination of multimedia instruction and automated assessment that provides students with a highly personalized, self-paced learning experience. Courses include: varying levels of algebra, geometry, calculus, physics,

electricity & magnetism and more. Two types of courses are offered to meet the individual needs of students and their families:

- Tutor Supported Courses include the guidance and instruction of expert tutors.
- Independent Study courses allow students to work at their own pace with the supervision of their parents.

These online courses can be used with any connected device and enrollment periods are quarterly. In only 20 minutes per day, students can increase their educational foundation or advance beyond what they have learned in the classroom. Visit the <u>website</u> today to see what courses are available.

Restructuring of Stanford's Pre-Collegiate Offerings

Stanford University's <u>Pre-Collegiate Studies</u> now serves as a home for a variety of programs designed to serve academically talented, intellectually curious precollege students. It offers academic full-year programs, including the Stanford Online High School, University Level Online Math and Physics, and Math and Science Circles, and summer programs including Stanford Summer College, Pre-Collegiate Summer







Institutes for middle and high school, Stanford University Mathematics Camp (SUMaC), Summer Humanities Institute (SHI), Stanford Medical Youth Science Program and Stanford Youth Orchestra. The new Stanford Pre-Collegiate Studies structure allows these programs to share expertise and resources; many students participate in more than one program.

Largest Undergraduate Scholarship in the Nation Available to High-Achieving, Low-Income Students

JACK KENT COOKE

The Jack Kent Cooke Foundation is accepting applications for its College Scholarship Program, the largest undergraduate scholarship in the country. Recipients will be awarded as much as \$40,000 per year for four years for tuition, books, living expenses and other

required fees. Up to 40 spaces are available to high-achieving high school seniors with financial need who seek to attend the nation's best four-year colleges and universities. To be eligible to apply for this scholarship, applicants must plan to graduate from a U.S. high school in the spring of 2015 and enroll in an accredited four-year college in the fall of 2015; earn a cumulative, unweighted GPA of 3.5 or above; receive a SAT combined math and critical reading score of 1200 or above or an ACT composite score of 26 or above; and demonstrate unmet financial need. The application period will close on November 4, 2014. Final notification to accepted students will be made in March 2015. For information about the College Scholarship Program, click <u>here</u>.

Davidson News

The Davidson Academy of Nevada

A free public school, <u>The Davidson Academy of Nevada</u> encourages and supports the abilities, strengths, and interests of profoundly gifted middle and high school students who score in the 99.9th percentile on IQ or college entrance tests, such as the SAT or ACT. If you are interested in applying to The Davidson Academy for the 2015-2016 school year, please review the <u>Qualification Criteria</u> and <u>How to Apply</u> pages for more information.



Upcoming Tours for Prospective Students

Each month during the school year, The Davidson Academy hosts a tour for prospective students and their parents. Visitors will meet current Academy students, parents, faculty and staff, and ask specific questions about the school. Upcoming school tours will be held on the following Fridays: **Sept. 26**, **Oct. 24**, **Nov. 21** and **Dec. 12**. RSVPs are required. For additional details and to RSVP, please visit the <u>Tours</u> page.

Free Guidebooks for Gifted Learners

The Davidson Institute offers FREE, online access to educational planning <u>guidebooks</u> focused on various topics such as advocacy, early college and mentorships, gap year, homeschooling and giving back. With a wide variety of articles and tools, these comprehensive guidebooks help direct parents and students through the process of searching for an appropriately challenging educational setting.



Educators Guild

The Davidson Institute's <u>Educators Guild</u> is a FREE national service for active elementary, secondary and post-secondary educators, as well as other professionals who are committed to



meeting the unique academic needs of gifted students. You can become a member of this free online community by subscribing <u>here</u>. There is also an Educators Guild <u>discussion group on Facebook</u> - join today!

Legislative & Policy News

CALIFORNIA - Encinitas Union School District recently revised their math acceleration criteria seeking to lower gaps in student's fundamental math knowledge by increasing the difficulty to qualify for math acceleration. Source: Encinitas Advocate

<u>COLORADO</u> - The Salida School District is changing its approach to and the number of students in its gifted and talented program, by expanding this year's screenings for the gifted and talented program and growing the program. Source: <u>The Mountain Mail</u>



DELAWARE - Delaware State University announced the opening of their first Early College High School earlier this month. This new tuition-free program provides students the opportunity to participate in college courses while attending high school. Through its partnership with EDWorks, Delaware State allows students to complete up to four years of college courses, and up to 60 college credits, before their graduation from high school. Source: Digital Journal

FLORIDA - Dale County will be observing all second graders as potential gifted students for their gifted program. They will be using a behavior checklist that focuses on aptitude, characteristics and performance. They are also asking for referrals from any teachers, counselors, administrators, parents/guardians or peers that know of an individual who may be qualified. Source: <u>South East Sun</u>

IOWA - Due to a new grading system, Des Moines middle schools will no longer offer stand-alone advanced English and science classes; however, accelerated math courses will remain. Students will have the option of completing honors-level assignments within general education classrooms or taking accelerated courses at a magnet school near downtown. Source: <u>The Des Moines Register</u>

KENTUCKY - Bullitt County recently opened Discovery School for middle school students. This school focuses on offering students gifted in math and science a more in-depth and accelerated education. Students are able to begin earning high school credit in the sixth grade. Source: <u>Courier-Journal</u>

MINNESOTA - Southgate Elementary School is hosting a new program for 19 top students from the entire district. The program, called Pi Academy or Personalized Instruction Academy, will include two first-graders, eight second-graders, four third-graders and five fourth-graders who will be learning together in one classroom with lessons based on skill level versus grade level. The top 10 percent of students were invited last year based upon data from reading, math and the cognitive abilities tests. Source: <u>Austin Daily Herald</u>

MISSISSIPPI - The gifted program in Picayune school system is available for elementary school students in grades second through sixth. Mass screening is done each year for students in the first grade, however students can be screened at any time between second and sixth grade. A student must score in the 91st percentile with an IQ of 120 to qualify for the program. Source: <u>Picayune Item</u>

MISSOURI - The Kearney School District announced a new name for their gifted program for the 2014-2015 school year. The original title of the program "Beyond Basics," was transformed to "GATE: Gifted and Talented Education." The district reports that the name change was conducted with the aid of students in the program, who constructed the name and tallied a vote, before handing it off to elementary principals and central office administrators for approval. Source: <u>The Kearney Courier</u>

MONTANA - University of Montana (UM) received a \$1.5 million dollar donation to fund a professorship specializing in gifted education and advanced learning in the classroom. The donation will also be used to fund research into how to best motivate gifted students. Source: <u>Missoulian</u>

NEVADA - The Lyon County School District policy and state law currently only cover retention, but not acceleration. However, changes have recently been approved to add acceleration to its promotion/retention policies. These changes will be made for kindergarten through eighth grade. The policy revision uses similar requirements for acceleration of students as the current retaining of students. Parents or legal guardians must request students to be considered for acceleration, but the final choice of placement is that of the teacher and school principal. Source: <u>Reno Gazette Journal</u> (original article)



NORTH CAROLINA - Parents of Academically or Intellectually Gifted children (AIG) are upset with school officials regarding the lack of communication about the class placements of their children and the dismantling of the AIG program at Roland-Grise Middle School. Source: <u>WECT 6</u>

<u>OHIO</u> - Lewis School for Gifted Learning Potential opened in Youngstown. This school offers third through sixth grade with plans for future expansion. Sources: <u>WKBN</u> and <u>Vindicator</u>

PENNSYLVANIA - Carnegie Mellon University has decided to discontinue its Institute for Talented Elementary and Secondary Students (C-MITES) which offered summer programs in math, science and the humanities. Source: <u>Pittsburg Post-Gazette</u>

SOUTH CAROLINA - Bamberg-Ehrhardt High School introduced online course offerings through Edgenuity, an organization that provides increased course options for gifted students. Source: <u>The Times</u> and <u>Democrat</u>

TEXAS - Palo Alto College has partnered with four local school districts to offer early college options to high school students. Students are able to earn up to an associates degree or 60 hours of college credit while earning their high school diploma. Source: <u>San Antonio Business Journal</u>

Grand Prairie school district recently opened a charter school, called A School for the Highly Gifted, for 45 elementary students from throughout the district. Source: <u>Dallas Morning News</u>

<u>UTAH</u> - Some resources for students in Utah are gifted services, free ACT testing, online courses, student advocacy, tutoring services and language immersion programs. Source: <u>KSL</u>

VIRGINIA - The superintendent of New Kent schools, is taking steps to improve the schools and implement a mathematics acceleration initiative for the current school year. Students will have a chance to progress faster with this new plan and move forward beyond the typical advancement by grade. New Kent's proposed plan will begin with fifth graders who pass Standards of Learning tests with a required score. After these requirements are met, students can be recommended by their teachers to take accelerated courses. Source: New Kent - Charles City Chronicle

WISCONSIN - Leonardo Da Vinci School for the Gifted, kindergarten through sixth grade, opened in downtown Green Bay. Source: <u>Fox11online</u>



How gifted-friendly is your state? Find out on the <u>Davidson Gifted Database State Policy Map</u>. If you know of new legislation, please contact the <u>Communications Team</u>.

On the Web

Gifted Exchange Blog

Read Laura Vanderkam's take on all things gifted. One of her recent posts is, <u>The After School Solution</u> which discusses after school programs for Gifted Education.

National Association for Gifted Children Launches Redesigned Website

The <u>National Association for Gifted Children (NAGC)</u> recently launched a redesign of their website. The new site was created with various audiences in mind, such as educators, parents, administrators, college and university faculty, elected officials and reporters. With the enhanced design and navigation, users can easily search and find updated information on a number of issues. The <u>Information and Publications</u> section contains a wealth of resources, including a link to the NAGC <u>Gifted and Talented Resources</u> <u>Directory</u> and the <u>Gifted by State</u> data. Much of this information results from the work done on behalf of NAGC members to keep the need for quality programs and services for high-ability learners front and center. Thank you and keep up the great work!

New Web Resource – GiftedandTalented.com

Not only does the <u>GiftedandTalented.com website</u> offer EPGY online courses, but also a variety of resources that support advanced learners including:

- Challenge Zone Fun academic games and interesting problems designed for gifted and talented students will keep young students engaged and learning.
- Expert Picks Curated articles, events, resources and research studies are shared. Engage
 with gifted and talented experts and other parents on the best ways to develop advanced
 learners.
- Spotlight Celebrate the achievements of students and other members of the GiftedandTalented.com community.

Featured Articles and Resources

The Davidson Gifted Database at <u>www.DavidsonGifted.org/DB</u> is a gateway to resources for and about gifted students. See what's new!

Articles

This article, <u>Tips for Parents: Helping Your Gifted Child or Teen</u> <u>Cope With Death and Chronic Illness</u>, is from a seminar hosted by Kiesa Kay.

<u>Hope Is More Than Wishful Thinking</u>, by Janette Boazman, explores the concept of hope and how it plays can play an integral part in gifted education, as well as teaching methods to help students utilize hopeful thinking.



<u>Adventure Write Kids - Totem Head's Story Contest</u> free writing contest is for anyone under 19 years old. There is a cash prize and the winner's story gets published.

<u>Jacob's Ladder</u> is a proactive enrichment program for intellectually gifted children who face obstacles to success.

Kids Know It Network's mission is to provide quality educational activities, products, movies, music, games, articles, textbooks, learning programs, lesson plans and worksheets - all free of charge.

Find <u>online colleges and universities</u> by searching this online database. Community colleges, public colleges, private universities and other institutional models all provide high-quality, post-secondary opportunities to thousands of career-minded students each year.

<u>Space Education Resources</u> provides a list of links for students interested in space science and those wanting to learn more about space and astronomy.

<u>ZoomSci</u> is a fun science website based on the PBS television show *Zoom*. The site includes a Parents & Teachers section as well as fun experiments for





students.

Suggest a Resource

Suggest an Article

In the News

September 2 - USA Today, Thiel Fellowships get young entrepreneurs going (Medha Imam) August 28 - Rotarian Magazine, Boy Genius The Rotarian (Tom Clynes) August 28 - Business Standard, EI, Duke TIP to have 3 week programme for Indian students at Shiv Nadar University (M Saraswathy) August 27 - Star Tribune, Back to school: Gifted students are ill-served (Stephen Schroeder-Davis) August 24 - Sydney Morning Herald, High schools group students based on test results (Alexandra Smith) August 21 - San Diego 6, Davidson Fellows 2014 (San Diego Living) August 18 - KQED.org/Mind/Shift, Study: Pro-social mindset may help improve math, science grades (Ingfei Chen) August 13 - Edutopia.org, How Learning Profiles Can Strengthen Your Teaching (John McCarthy) August 12 - EdSource Today, New twist to old debate on accelerated math (John Fensterwald) August 12 - TIME, Top Mathematics Prize Awarded to a Woman for First Time (Alex Bellos) August 12 - Gallup.com, Left to Chance: Early Identification and Development of Gifted Entrepreneurs (Jim Clifton) August 7 - Education Week, How Can Teachers Build on Gifted, Hyperactive Students' Strengths? (Sarah D. Sparks) August 7 - U.S. News University, Two Gifted Teens Pursue Master's Degrees (Rebecca Strong) August 3 - Washington Post, Why college kids aren't timid or lost (Jay Mathews) July 30 - Washington Post, Why smart, poor kids lied about college (Jay Mathews) July 28 - Edutopia.org/Differentiated Instruction blog, 15+ Readiness Resources for Driving Student 8/7 Success (John McCarthy)

Discuss these stories and more on the **<u>Gifted Issues Discussion Forum</u>**.

In the Spotlight

Valerie Ding A 2014 Davidson Fellow Making a Difference

What kind of impact can your Fellows project, "Novel Next-Generation Multijunction Quantum Dot Solar Panel Designs Using Monte Carlo-Based Modeling" have on society?

Every single year, we emit 30 billion tons of carbon dioxide – more than 100 times the combined weight of the entire human race – into Earth's atmosphere just by burning fossil fuels to meet our energy needs. This causes environmental, health, and climate issues. Meanwhile, just 45 minutes of sunlight, if harnessed, is enough to supply complete global energy needs for an entire day. So why is solar power, a practically unlimited renewable energy resource, less than one percent of world consumption today? The problem lies in cost, which is driven by efficiency.



Today's average solar panels are 15 percent efficient. Multijunction solar cells can improve this efficiency, but are more expensive. Quantum dot solar cells can lower cost, but are currently only eight percent efficient at best. Thus, this project combines the high-efficiency multijunction design and low-cost quantum dots, and introduces a fast, accurate and cost-effective quantum mechanical model, the first that can quantitatively predict efficiencies of multijunction quantum dot solar cells as well as identify the highest-efficiency solar cell designs. This model would allow researchers to focus their efforts on particularly promising designs in future experimental work, drastically reducing redundancies, and time spent from years and months to weeks or even days.

What are some of your short- and long-term plans?

Short-term, I continue to work on improving my model and investigating added variables, with thanks to the support and encouragement of the Davidson Institute. Another focus project is advocating female involvement in STEM, especially in my local community where I coach middle school MathCounts and Science Bowl teams. Long-term, I hope to work towards an advanced degree in a computationally- and data-intensive field such as physics, an example of which is nano/quantum physics, which I have explored in high school through science research projects. My overarching and ultimate personal goal, which stems from an ever-present desire to understand and learn as much as possible, is to foster a sustainable lifestyle by dedicating myself to the advancement of scientific thought and spearheading applications and initiatives to improve quality of life, such as working on sustainable energy technologies, attempting to explore diverse systems of the world.

Please describe your academic setting and some positive experiences with mentors.

I am a senior at the Catlin Gabel School, where I have the great honor of working with mentor Dr. Veronica Ledoux on a daily basis. Dr. Ledoux has provided invaluable guidance, support and feedback as I work through everything from extensive literature searches to inconsistencies in my models to travelling to and presenting at science fairs. I look forward to another year working with Dr. Ledoux. Over the course of this work I was also advised by Mr. Bob Sauer, my physics teacher, and Mr. Andrew Merrill, my computer science teacher, who taught me critical skills, and provided encouragement and feedback on my research. I have been blessed with the guidance of solar expert Dr. Bjoern Seipel at SolarWorld, who previously conducted research on quantum dots, and provided many enlightening discussions on state-of-the-art solar cell research and industry, particularly the use of quantum physical modeling in solar cell research.

Closing Thought

"...the most exciting development in 30+ years of gifted education advocacy was just starting to blossom: the founding of the Davidson Institute for Talent Development...

If the field of gifted education had superheroes, Jan and Bob Davidson would both have magnificent capes."

~ Dr. Jim Delisle, in his new book, Dumbing Down America

If you have information to include in future eNews-Updates, please email our <u>Communications Team</u>. If you have been forwarded this eNews-Update, and wish to receive future editions, <u>sign-up here</u>.

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