

Dr. Mark K. McQuillan Commissioner

September-October 2007

Dr. Abigail L. Hughes Superintendent

Ellis Tech physics guru gets 'photonics' grant

The New England Board of Higher Education (NEBHE) has provided funding to Donna Goyette, physics instructor of **Ellis Tech** to field test a photonics curriculum developed through PHOTON PBL, a project funded by a three-year, \$750,000 grant from the National Science Foundation (NSF).



The NSF grant to NEBHE is the fourth in a series that funds curriculum and

professional development projects that strengthen photonics curriculum in secondary schools and two- and four-year colleges in New England and throughout the country. The new grant employs problem-based learning (PBL) in which students solve real-world "challenges" presented by industry and research partners.

PBL has been used extensively in medical education since the early 1970s and widely adopted in other fields including business, law and education. Now, it is beginning to emerge as an alternative to the traditional lecture-based approach in engineering and technology education.

Ellis Tech is among 27 secondary and postsecondary schools accepted to the project. Once the field tests are underway, the project team will conduct quantitative and qualitative research on the efficacy of PBL in photonics education and eventually publish

and present the findings to an international audience with a focus on U.S. secondary schools and community colleges.



"Problem-based learning offers a vital enhancement to traditional instructional methodologies as it prepares educators and their students for today and tomorrow's high technology workplace," said NEBHE President Evan S. Dobelle.

Partners include: Boston University Photonics Center, California State Polytechnic University Pomona, Pennsylvania State Electro-Optics Center, Flemming Tinker LLC of Connecticut, PVI Systems of Connecticut, IPG Photonics Corp. of Massachusetts, Photomachining Inc. of New Hampshire and Photodigm Inc. of Texas.

"Students will gain the skills that are crucial in a rapidly changing technology field, challenge partners will receive national exposure and we'll all benefit from the development of a pool of young problem-solvers," said the project's principal investigator, Fenna Hanes of NEBHE. For more information, go to the following site: <u>http://www.nebhe.org/photonpbl</u>.

CTHSS closing CAPT gaps with state averages

Connecticut's technical high school students continue to show strong performance on the Connecticut Academic Performance Test (CAPT). Over the past three years, CTHSS scores have increased steadily.

Because a new generation CAPT was introduced this year, it is not advisable to compare performance from last year to this year. However, a review of the percentage of CTHSS students scoring at proficient or above compared to state averages shows that tech students statewide are closing the gap with state averages. For example, in science, CTHSS students brought their scores to within 1.1 percentage points of the state average by closing the gap by 1.4 percentage points.

CTHSS Average CAPT vs. State Average CAPT (Percentage of students scoring proficient or above)

Subject	2006	2007	Closed gap by	Difference
Reading CT	79.9	79.7		
Reading CTHSS	76.7	77.3	+.8	2.4
Writing CT	81.9	82.2		
Writing CTHSS	81.7	79.6	-2.4	2.6
Math CT	77.9	77.2		
Math CTHSS	75.3	74.8	+.2	2.4
Science CT	82.2	81.4		
Science CTHSS	79.7	80.3	+1.4	1.1

Commissioner cites CTHSS as model for reform

As a State Board of Education committee prepares its recommendations for changing the structure of Connecticut's high schools, including graduation requirements, Commissioner Mark K. McQuillan says the state's technical high school system should be considered a national model for school improvement.

In a recent interview on WICC radio, the Commissioner said," The transformation of Connecticut's technical high school system is a remarkable story which can give us insight into how Connecticut can reform its high schools. The tech schools provide programs that are relevant for students and for Connecticut's economy, the curriculum is rigorous and every graduate has the option of choosing college, a meaningful job, or both." He said that the tech schools aren't appropriate for every student, but it would serve the state well to expand them further.

Whitney Tech's 50th anniversary is opportunity for history project highlighting graduating classes

Last June, Eli Whitney Technical High School held a milestone graduation. As those students walked across the stage, they became the 50th class to graduate from Eli Whitney.

During the Eli Whitney Alumni dinner/dance held at Westwoods Banquet Hall, students from the Class of 2007 unveiled a timeline that they created showing historical points of interest in Eli Whitney's history over the last 50 years. The students created this timeline in their Public Communications class with their teacher Ms. Coughlin. The students had to conduct extensive research to create this timeline, gathering most of the information through old yearbooks. This required a great deal of time and effort. The students who created this timeline should be commended. Acquiring unique information about each graduating class can be tedious. The creation of this timeline is a testament to these students and Ms. Coughlin.

The Class of 2007 is now connected to the history they wrote about: they are now the Semi-Centennial graduating class of Eli Whitney.

Goodwin students illuminate high-tech barn

Students of Goodwin Tech's Electrical Department are currently wiring a 3,000 square foot barn as part of their field studies.



Students are installing a 400 amp electrical service with 2 electrical panels. Each panel has a 200 amp main with a 40 circuit capacity. The barn has 2 floors. The first floor will be used as a workshop for the owner.

Twelve wood-working machines will be wired in the workshop. Each machine is 240 volts and on dedicated circuits. Machines

will be drill-presses, table saws, radialarm saws, band saws, planers, and joiners. The second floor will be used for office space. Lighting in the barn will be a combination of metal-halide, T-5 fluorescent and low-voltage track lighting.



Students will be installing all the power, lighting and network cables for the computers in the office, as well.

SMA Recognizes I vana Santiago as Student of the Month

At its September 11th meeting, the SMA recognized Kaynor Tech student Ivana Santiago as the Student of the Month. Ivana is a 12th grade Manufacturing Technology student Kaynor's Advanced Manufacturing Technology Center located at the Naugatuck Valley Community College. She is a very pleasant student with a 90 average in shop and a 90 average in theory.

Ivana is extremely well liked by her teachers and peers and she has an incredible amount of desire to help all within her reach. Most notable about Ivana's work experience to date is that during this past summer she participated in Sikorsky's Union Mentor Program as a CNC operator making transmission covers for Black Hawk Helicopters. Her plans are to continue in the manufacturing technology field as an apprentice.



Congratulations Ivana!!

2,800 CTHS Freshmen Welcomed on First Day

To help the incoming freshman students to the Connecticut Technical High School System, several schools organized a freshman orientation in order to provide a smooth transition from the middle school setting to the technical high school setting.

Vinal Technical High School developed a "Freshmen First Day" on August 30th that provided incoming freshmen with important school information, activities and a day of fun! Half of the first day was spent in freshman classes where the students received a brief overview of the course and an opportunity to meet the teachers. Freshman students then participated in team building exercises, met with support staff, received their schedules, reviewed Student Handbooks, and toured the building to meet the entire faculty and staff. Vinal's goal was simple: "when our new students enter the doors, we want them to believe they can be academically/technically successful and socially confident from the first day of freshman year until graduation."



Vinal freshmen having a great time on their first day!

Vinal's Summer Reading Program a Success

Vinal Technical High School's first summer *Celebration of Reading* was a success!! The goal was that every student would read at least one book between the last day of the 2006-2007 school year into the new school year. Students had a wide range of books that they could read over the summer in order to meet the goal. For example, novels, biographies, autobiographies, drama, a book of poetry or short stories, or a book related to a trade/technology area (that is not the course text) were all appropriate. The "Ultimate Teen Reading List" was also used as a resource for students.



Students had a variety of options to choose from to show that they have read the book including writing, visual representations or a discussion group. In order to provide students with the opportunity to

share their reading with their peers, September 10th was designated as *Celebration of Reading Day* where students showcased and shared activities among peers and teachers. Outstanding products were displayed and/or demonstrated to the student's technology or academic classes. Additionally, Vinal displayed outstanding products on the *Wall of Celebration* in the cafeteria. Students who participated earned extra credit in all academic subjects and technologies and are eligible to receive certificates or prizes.

Goodwin Tech Graphics Student Wins Card Design Competition

Jennifer Rodriquez, a Senior Graphics Technology student, was selected as the winner of the Connecticut Business and Industry Association's (CBIA) Holiday Card Design competition. Dayl Walker, CBIA's Education Foundation Program Manager, said that Jennifer's design was selected from over 100 entries from around the state. She stated that Jennifer's entry won because it met all of the requirements they were looking for in a holiday card design: suitable for business, non-sectarian with some aspects that would appeal to a more youthful audience.



Jennifer with her instructor Robert Bullard, Department Head of the Graphics Technology program at Goodwin Tech, and John Kallio, CBIA's Creative Director

John Kallio, CBIA's Creative Director, said that he was very impressed with Jennifer's work. Jennifer also met John R. Rathgeber, President of the CBIA, who was equally impressed with her professionalism and discussed the possibility of her doing an internship with them during this school year.

Emmett O'Brien Instructor on ABC's Extreme Makeover Home Edition

Roger Giori, an Electrical instructor at Emmett O'Brien Technical High School (EOB) in Ansonia, CT and graduate of Eli Whitney Technical High School in New Haven, CT will be appearing on television in a popular ABC network show. On Sunday, October 14, 2007 at 9:00 p.m. on Extreme Makeover the Home Edition viewers will see Mr. Giori and former EOB student, Ryan Mann, working alongside the Extreme Makeover staff.



The two men assisted in the construction of a new home in Bridgeport, CT. Over five-hundred people nominated Bridgeport's Brown family for the new home. Mrs. Brown had dedicated herself to providing a better life for her four children. Because of her commitment and dedication, she was able to move the family out of the housing projects and into a fixer upper home in Bridgeport, CT.

In April, a flood damaged the basement of the home. Then, an unanticipated fire destroyed the rest of the house. In addition, ensuing looting and robbery left the family in devastation. Roger Giori responded to the family's plight on a Sunday when an ad aired on Channel 8 at 9:00 p.m. He called the station and found himself on the job by 12:30 a.m. Monday morning. "I worked forty-five hours in a three day period of time, and the experience was fulfilling because I was helping a family in need." commented Mr. Giori. He added, "I have often worked with Habitat for Humanity to help people less fortunate than myself and to give back to the community."

Mr. Giori's contribution included helping the alarm company install security cameras, tiling the master bathroom shower, installing the front door, assisting with the girl's bathroom, and landscaping the backyard.



Ryan Mann, who is attending Emmett O'Brien's Adult Education Evening School Program for plumbing, participated in a variety of directed assignments with Mr. Giori. Mr. Mann also works at Ralph Mann and Sons Plumbing and Heating in Ansonia, CT. Doris Dupke, clerk typist for the EOB Evening School Program said, "I give Ryan a great deal of credit. He gave up his personal time to help others."

Congressman Courtney Visits Windham Tech

A visit from Congressman Joe Courtney of the 2nd Congressional District all began with an assignment that Windham Tech English teacher, Nory Oakes, gave her 11th grade students. Their assignment was to write a persuasive letter on any subject which they felt passionate about to a person who could make a difference. Many of the students decided to address their concerns to Congressman Courtney.



Congressman Joe Courtney speaks to the students of Windham Tech.

Four weeks went by, and as her students had received no letters from the Congressman, Nory decided to call his office to see if the letters had been received. By luck, her call was answered by Brian Farber, Courtney's Director of Communications in the Washington D.C. office, who was a former CT teacher himself. Farber explained that all of the mail sent to the office was routed to a laboratory across the country to be tested for anthrax. He mentioned that all Congressional mail was opened at the lab, and that some of it never makes its way back to D.C. Farber requested that the letters be faxed to his office, and said that he, personally, would ensure that each of them would get a response. He was also kind enough to spend several class periods speaking to the students over speakerphone, in order to explain why their letters had not been answered and to solicit student questions about Congressman Courtney and his positions on various issues. Farber suggested that Courtney might even be available to come to Windham Tech for a visit.

The students were gleeful as Courtney's responses arrived at the school. All responses were proudly put on display outside of the classroom. The students counted the days until his visit. On Monday, June 18, amid the chaos of graduation rehearsal, Courtney arrived at Windham Tech, accompanied by his bodyguard. Assistant Principal Judy Warren gave Courtney a whirlwind tour of some of the shops, while a group of around 100 students waited excitedly in the Tiered Lecture Hall. As Courtney entered the hall, a small group of them held up a "Welcome Joe" sign, painted by students. Ms. Oakes introduced the Congressman and following some brief comments. Courtney answered many of the students' questions. Before he left, the students presented him with a t-shirt signed by each of the students.

It was an exciting day at Windham Tech - one that engaged students in a meaningful way towards a greater understanding of the democratic process and a greater understanding of their importance to it.

CTHSS Students Excel in 2007 SkillsUSA National Championship

This summer, the Connecticut Technical High School System was represented by incredible students at the National Skills USA conference in Kansas City, MO.

As a system, the CTHSS finished top 10 in 9 events and top 20 in 7 other events. According to the national statistics the students were already considered to be in the top 2% in the nation before entering the national event. Among the top finishers, Gina Ferrucci from Platt Technical High School was the only medalist earning a Bronze medal in Cosmetology.



The following is a list of students who placed in the top ten:

- Thomas Rafferty, *Grasso*, 4th in Carpentry.
 Dylan Lavallee, *Norwich*, 5th in Residential Wiring
- Christopher Hawksley, Bullard Havens, 6th in Plumbing.
- Kris Young, *Bullard Havens*, 6th in Culinary Arts.
 Ryan Marklinsky & Pedro Soto, *Platt*, 7th in Robotics and Automation Technology.
 Juan Mazo, *Platt*, 7th in Technical Computer Applications.
 Scott Cloutier, *Norwich*, 8th in Electronics Technology.

- Jason Salvas, *Ellis*, 9th in Masonry.

All of the Connecticut Delegation did an outstanding job representing the CTHSS and achieved greatness just by making it to the National Conference in Kansas City.

1st Year Success for the New Constitution State Conference Football League

The Constitution State Conference has kicked off its inaugural season of its football league. The league currently consists of eight schools: Bullard-Havens Tech, Capital Prep, Cheney Tech, Platt Tech, Prince Tech, Sport and Medical Science Academy, Wilcox Tech, and Wright Tech. The creation of the league has allowed other Technical High Schools such as Grasso Tech and

Abbott Tech to begin fundraising efforts so that they can form a football program that will possibly participate in the CSC football conference next season!



CTHSS Announces 2008 Award Winners

Mr. Martin Sagendorf, Science instructor at Kaynor Technical High School of Waterbury, has been named as the Teacher of the Year for the Connecticut Technical High School System.



Mr. Sagendorf with Dr. Hughes, Principal Robert Axon and some of his Physics students.

Sagendorf has been teaching Science at Kaynor Tech for the past four years. Previously he worked in the Manufacturing industry and said that being named Teacher of the Year reaffirms why he decided to get into teaching. "I wanted to make a difference in my students' lives and this honor makes me think that perhaps I am doing just that."

Sagendorf will be honored at the 2008 CTHSS Recognition Dinner on October 17th at St. Clements Castle along with **Platt Tech's Gene LaPorta**, *Principal of the Year;* **Wilcox Tech's Russell Duffy**, *Assistant Principal of the Year;* **Norwich Tech's Linda Dame and Katherine Pellerin**, *Nurses of the Year;* **Ellis Tech's Leo Provost**, *Building Maintenance Supervisor of the Year;* and each schools' Alumni of the Year.

Norwich Tech Kicks Off System-wide Counselor's Recruitment Breakfasts

As the recruitment season kicks off system-wide, schools are inviting area principals and counselors to an informational breakfast/luncheon. On September 19th, Norwich Tech hosted their annual breakfast for the surrounding district counselors in the library media center. National Honor Society students helped to welcome the counselors as they entered the building and assisted in setting up the room. Each table was decorated with floral arrangements made by Norwich Tech's new Floral Design elective class. Middle school counselors listened to an informative PowerPoint presentation from Physical Education/Health instructor, Tim Krodel and Principal, Dr. Nikitoula Menounos.



All twenty-one middle school counselors who were in attendance for the breakfast left with informational packets as well as Norwich Tech giveaways!

System-wide school counselors and CTHSS recruitment teams are

planning exciting and energetic recruitment methods and presentations in order to attract 8th graders to the CTHSS. Good luck to all of the recruitment teams this year!!

Platt Technical High School Students Show School Pride by Repairing "The Swamp"

A few years ago, Platt Tech Carpentry students showed their school spirit by spending a long and difficult year building a Nature Center in the wetlands in the back of the school. Science instructors took their students to the center to study the wildlife first hand. Unfortunately, last year, vandals damaged a major part of the center.

Platt Tech students are now showing their spirit and determination by rebuilding the damaged areas so the Nature Center, known as "The Swamp," can once again be used by the school and community. Through a grant of \$10,000 from SkillsUSA and Lowe's of Orange, Platt Tech Carpentry sophomores, under the direction of instructor David Farrell, are repairing the damage done. Farrell said that it this is a great opportunity for his new Carpentry students. "They get to plan, measure, use power tools and get to see a finished product that they can be proud of," said Farrell.

In the revitalization effort, the Electrical department has also pitched in. Under the direction of Department Head Chet Cebulski, Electrical students are digging a 160 foot long trench where they will lay a cable to connect a series of lights to be installed throughout the Nature Center. To stop the vandalism from occurring again, they will also install security cameras on top of the lights.



Platt Technical High School Carpentry Sophomores work together to restore the school's outdoor classroom.

Principal Gene LaPorta said that this project is just another example of the "Can Do" attitude at Platt Tech. He stressed that the Learn by Doing approach makes such projects possible. "Without students providing the labor, this project would have cost over \$100,000 to do," said LaPorta

New England Wind Forum Newsletter Now Available!!

The New England Wind Forum (NEWF) announces the posting of its third <u>New England Wind Forum electronic newsletter (PDF 1.8</u> <u>MB)</u>. Through this periodic newsletter and the NEWF Web site, the NEWF has been developing a clearinghouse for objective information on wind power in New England since 2005.

This newsletter provides detailed updates regarding more than 30 wind energy projects under development throughout New England, as well as state and federal policy initiatives, a new "*Perspectives*" interview with Andrew Dzykewicz, Commissioner of the Rhode Island Office of Energy Resources, and introductions to several key technical subjects pertaining to wind energy - with links to additional, new information on these subjects on the NEWF Web site.