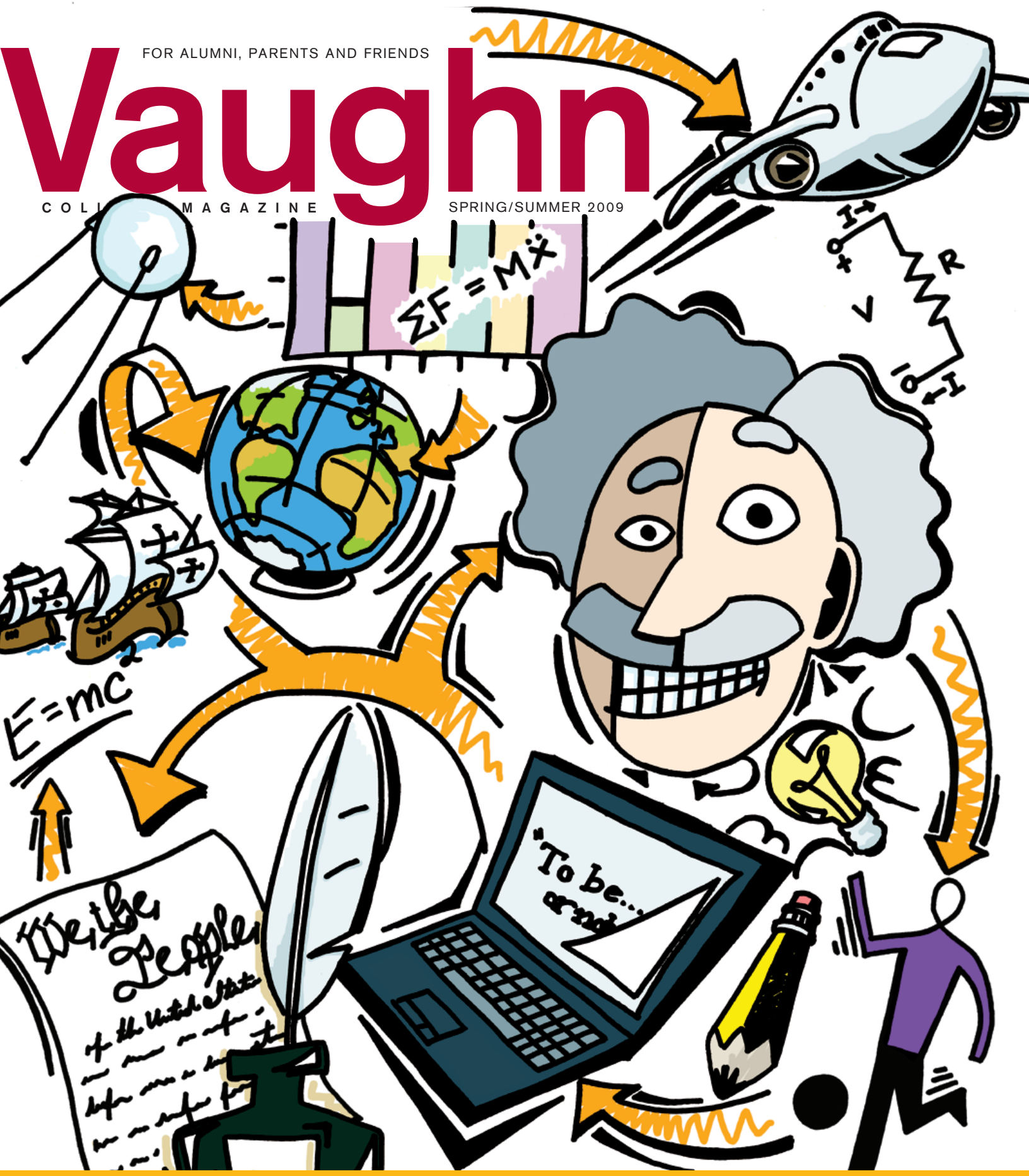
FOR ALUMNI, PARENTS AND FRIENDS

Vaughn

COLLEGE MAGAZINE

SPRING/SUMMER 2009



Faculty Reshape the Vaughn Academic Experience

Annual Financial Report 2007–2008

Robotics Club Designs an Eco-Friendly Aid to Farmers

Students take advantage of Vaughn's proximity to the rich professional, educational and diverse offerings of our city.

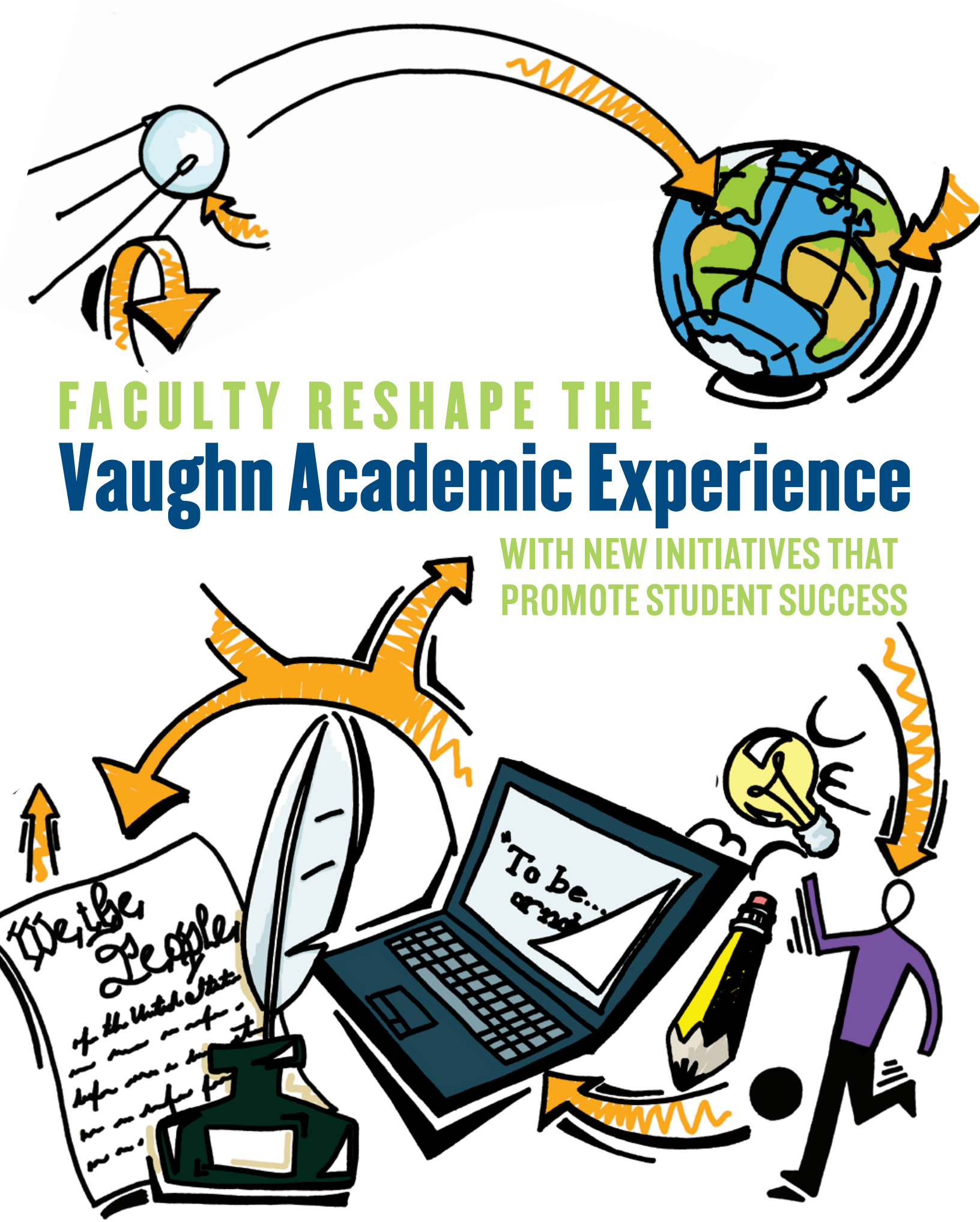
VOL. 10 | NO. 2 | SPRING/SUMMER 2009

PUBLISHER
Dr. Sharon B. DeVivo

EDITOR
Helene M. Brooks

CONTRIBUTING WRITERS
Helene M. Brooks
Vincent M. Papandrea

CONTRIBUTING PHOTOGRAPHERS
Mario Brienza
Neil Gouveia



FACULTY RESHAPE THE Vaughn Academic Experience

WITH NEW INITIATIVES THAT PROMOTE STUDENT SUCCESS

Education is not the filling of a bucket, but the lighting of a fire.

This wonderful quote from the Irish poet William Butler Yeats aptly describes the feeling on the Vaughn campus—faculty and staff are infused with the motivation to find new ways of teaching and learning that keep students engaged, persisting and focused on graduating.

As noted by President John Fitzpatrick, "From restructuring the freshman year experience course and creating innovative new experiences in the classroom, to designing new physical space on campus for academic support services and flight simulators, Vaughn is demonstrating its committment as a small college that provides a unique and fulfilling academic experience for our intellectual community."

The resources to implement these initiatives come as a direct result of the $8.9 million in grants awarded to Vaughn and its partner, LaGuardia Community College, as funded by the federal government's College Cost Reduction and Access Act. Passed last spring, the grant provides $100 million for Hispanic-serving institutions. LaGuardia has extensive experience in several of the initiatives underway at Vaughn, including learning communities, supplemental instruction and electronic portfolios.

"Vaughn is very fortunate to have an experienced partner to assist us in building these new initiatives," commented Vice President of Academic and Student Affairs Sharon DeVivo. "LaGuardia's wealth of experience and similar student population will allow us to build an academic experience that has proven successful in retaining and helping students achieve a degree. Vaughn faculty have embraced these new ideas and are eager to see them in action which has really created an exciting atmosphere on campus."

In addition to those initiatives being supported by our partnership, faculty are also focused on enhancing the first-year experience with a fresh look at math remediation and the opportunity to practice research, writing and presentation skills in the first semester.

Fascinating Intersections Found in Learning Communities

Like any form of collaborative scholarship, successful team teaching integrates the strengths of several viewpoints that no single instructor could achieve on one's own. Team teaching allows students and faculty to benefit from the healthy exchange of ideas on a subject that is shared.

This fall, several faculty members will be working together to offer Vaughn students a new, holistic approach to the courses they take. Learning communities began in higher education in the mid-1980s and take many different forms, from linked courses to live-learn communities where students live in themed housing. To begin, Vaughn learning communities will link two courses which enroll the same cohort of students. At least three intersection points will occur between the courses and, in some cases, the courses will be completely integrated. Headed by Dr. Paul LaVergne, chair of the liberal arts and sciences department, pairings this fall will include mathematics and engineering, physics and history, and remedial math and English.

"As an example," said LaVergne, "history and physics may appear at first glance unrelated. However, learning about the innate sense of curiosity that great scientists such as Galileo, Newton and Einstein had helped students to view physics and math principles in a less abstract and more engaging way. Also, these scientists have had a profound effect on the history of our society and the forward movement of modern civilization, and we imagine it will be fascinating for faculty and students alike to study those fields in the context of the other."

When engaged in a true collaborative manner, the results of a learning community can be very beneficial for students, and those who engage in a learning community are retained by institutions at a higher rate. In order for a learning community

to be successful there must be a good fit in personality, expertise and teaching philosophy for the instructors. Their areas of expertise should complement each other, and there has to be willingness to compromise on those issues where professors have been accustomed to having autonomy.

A consensus on the course design is also important. To assist Vaughn faculty in designing their courses, LaGuardia Community College has invited Vaughn faculty to join theirs for monthly sessions to discuss their planning and progress. LaGuardia is considered a national leader in learning communities and Vaughn is very fortunate to have their expertise available as we move in this direction. LaGuardia's Dr. Phyllis Van Slyck, a national expert, has been an invaluable source of knowledge and support for this project.

Working as a team, teachers model respect for differences, interdependence and conflict-resolution skills. Teachers of different backgrounds can culturally enrich one another and their students. Working in teams spreads responsibility, encourages creativity, deepens friendships and builds on the concept of community. In addition, contrasting viewpoints encourage more active class participation and independent thinking by students on such issues as gender, race, culture and age.

Supplemental Instruction—Helping Students Succeed in At-Risk Courses

While Vaughn offers essential academic support services for students experiencing difficulty in their coursework through the academic resource center, there has always been a challenge to provide students with more support in those courses where students are particularly challenged, such as in math and science courses. Another way to think about this is finding a way to support at-risk courses and not just at-risk students. Supplemental instruction (SI) provides that type of support by using a student who has previously passed an identified "at risk" course with a "B+" or better and having them sit in the course and then offer additional time outside of the regularly scheduled class time to review material and work on problems. Student participation is entirely voluntary.

This initiative is also being led by Dr. Lavergne, along with Said Lamhaouar, assistant vice president of academic support services, under the guidance of LaGuardia Community College. LaGuardia has had its own SI program for many years and has found that, on average, students who participate in SI receive one higher final grade in the course than the students who do not participate. This is an academic enrichment program providing students with a casual and relaxed environment in which they can strengthen their understanding of course material, develop effective study skills, compare notes with

Dr. Paul LaVergne's, chair of the liberal arts and sciences department, undergraduate mathematics teaching philosophy:

1. Strive to understand the student's perspective

As a teacher, I always keep in mind my own experiences as a student. As a student, I have been both at the top of my class and in positions where I struggled. I explain this to students in the hope that they will feel more comfortable approaching me if they need help.

2. Work to keep students engaged

One way that I encourage student engagement is to include a weekly problem-solving session. I provide students with extra problems to work on in class and then sit down and help them individually with their work. Another method that works well is to have students work at the board in pairs. Pairing them relieves the pressure they might feel working problems out in front of the professor.

3. Pay close attention to student feedback

At the end of my lectures I often ask students if they have any questions. Like most professors, the reaction I get is that the same students will ask a question. The problem with this is I have no idea what the remaining 90 percent of students are thinking. Next semester I plan to adopt a new strategy. I will ask all students to write down their most important question and then turn it in anonymously. This will force students to think about what is puzzling them. I will then read all the questions to the class and answer them.

4. Continually assess and improve my teaching methods

I continually assess my teaching and students on both the program level and the course level.

5. Strive to increase my own mathematical knowledge

In order to become a more effective mathematics teacher, I must continually work to learn more about my own personal research interests and mathematics in general.

6. Emulate the example of many fine professors

Years after sitting through some of my classes, I still think about what made the truly great classes as good as they were. I continue to learn from these professors and apply their methods in my own classes.

classmates and prepare for upcoming exams. Coordinated through the office of academic support services, Lamhaouar notes, "Supplemental instruction allows us to reach students in a new way and to be more intrusive in providing the support a student needs to be successful in a given course long before they are referred by a faculty member for what is often a failing grade."

A successful SI program requires dedication, as students must commit to serving for a full semester, attend all ongoing training and leadership development meetings, hold extra sessions during exam review weeks and meet other obligations. The benefits to students include the opportunity to review and deepen their understanding of course material, finding and developing their own styles of leadership, maximizing peer-to-peer interaction and encouraging students to persist with their studies. It is also an excellent credential to add to their resumes when seeking that important first job after graduation.

Building Success for Students in Math

Math is a critical tool for every student at Vaughn, regardless of their degree program, as almost every student is required to take calculus and physics. Many incoming freshmen at Vaughn do not come equipped to take the first college-level math course: pre-calculus. As a result, they may need to enroll in either one or two levels of math remediation. As Associate Professor Rodney Dash knows only too well, students do not like being told they must take remedial classes. "The word makes them feel inferior to other students. We need to reframe the whole notion and help students to understand that these foundation math

Dr. Rahemi's, chair of the engineering and technology department, personal teaching philosophy includes a methodology that changes continuously to coincide with the changes in technology and that adopts new tools to improve student-learning outcomes. Some of the teaching strategies he has adopted include:

1. Communicate

Open communication in the classroom establishes a friendly and welcoming environment and allows the instructor to know more about each student.

2. Be a role model

Strive to make a positive difference in the lives of students and create an environment conducive to learning.

3. Improve teaching skills

Course materials are prepared and developed in a manner that satisfies the students' learning objectives. I concentrate on teaching that motivates students' reading, critical thinking and writing abilities.

4. Promote problem solving

For engineering and engineering-technology courses, problem solving is required in order for students to understand the application of engineering laws and principles in real-life problems.

5. Apply technology to the classroom

Advancements in technology and computer software have resulted in innovative educational tools that are beneficial to the students' learning process and for the completion and presentation of their work.

6. Develop a meaningful course assessment process

Developing such a process allows the instructor to identify weak elements of the course and to introduce teaching strategies to address them.

Rodney Dash, associate professor in the liberal arts and sciences department, is committed to assisting students in changing their mind about their ability to succeed at math. He does this in classroom by:

1. Introducing complex concepts in small steps and in a logical order.

2. Teaching students to take responsibility for their learning outcomes.

3. Designing curricula for smaller class sizes and develop specific skill sets for all math courses.

4. Demonstrating that practice pays off.

5. Fostering a "can do" attitude.

6. Never giving up.

classes are the building blocks for mastering math," he noted. Dash is currently leading an effort to restructure math remediation at Vaughn.

When describing the need to take these courses, Dash believes students need a vision and a plan before they can move to higher mathematics. Athletes may not enjoy practice sessions, but they serve a specific purpose: to allow them to enjoy little victories that enable them to persist all the way to the all-star games. "Sports is a good analogy," explained Dash, "because it reminds us that athletes receive support and help along the way from coaches, other teammates and their families."

This summer and into the fall semester, Dash will be working with the faculty who teach these two levels of remedial math to create a common syllabi, choose new texts for both courses and designing a "bank" of math problems that all faculty can draw upon for homework, quizzes and tests. By creating a more homogeneous experience across these courses, students will come equally equipped to pre-calculus.

Redesigning the Engineering Freshman Year Experience

Dr. Ray Addabbo, professor in the arts and sciences department, in concert with the engineering and technology department, is leading the effort to design a course that all engineering freshmen will be required to take. Based on the learning community model, this introduction to engineering course will be connected with the freshman year experience course to integrate the various elements of engineering education that are indicators of success. The course will use four experiments from mechanical and electrical engineering as a basis for combining the tools students are learning in other courses. Each experiment will have a component from physics and Matlab (computer software) to analyze or simulate data. The last component will include writing and group presentations. Addabbo plans to pilot two sections this fall and has submitted his idea to the National Science Foundation for grant funding. The goal is to have students develop their writing, critical thinking and presentation skills.

Electronic Portfolio: Engaging the Whole Student

More and more colleges are implementing electronic portfolios as a central means for students to present a full picture of their learning experiences. Known as e-portfolios, they are designed to help students connect what they have learned during their academic tenure in a variety of different contexts, from academic performance to workplace experience to community service. This past spring Professors Khalid Mouyaouya and LaVergne, along with Assistant Vice President Said Lamhaouar, participated in a LaGuardia Community College cohort of higher- education

institutions in the region interested in launching e-portfolios for their students. Together, they developed a plan to roll out e-portfolios for Vaughn students beginning with a pilot of management students.

Most e-portfolios have a mission and vision statement about the goals and personal values of the individual, a résumé, samples of projects and participation in workshops and seminars. Rather than thinking about their degree program as a series of unrelated courses that must be completed to graduate, students can use the e-portfolios to think about the interrelation of their college experiences.

Faculty and administrators can also use the information to improve courses, degree programs and services based on a student's reflections and documented experiences, as the e-portfolio is a powerful assessment resource.

An exciting academic year is before Vaughn as it begins the implementation of learning communities, supplemental instruction, improvements to foundation math courses and the launch of e-portfolios. "All of these initiatives are designed to create a cohesive Vaughn academic experience that connects students to faculty, and each other, in a way that creates a meaningful context for learning," said President Fitzpatrick.

"By creating more opportunities for 'sense-making' students will have a greater understanding of the educational process and the support system in place that helps them stay on the path of achieving a college degree—one of many steps on the path to a lifetime of success."

Dramatic Renovations Improve Academic Experience

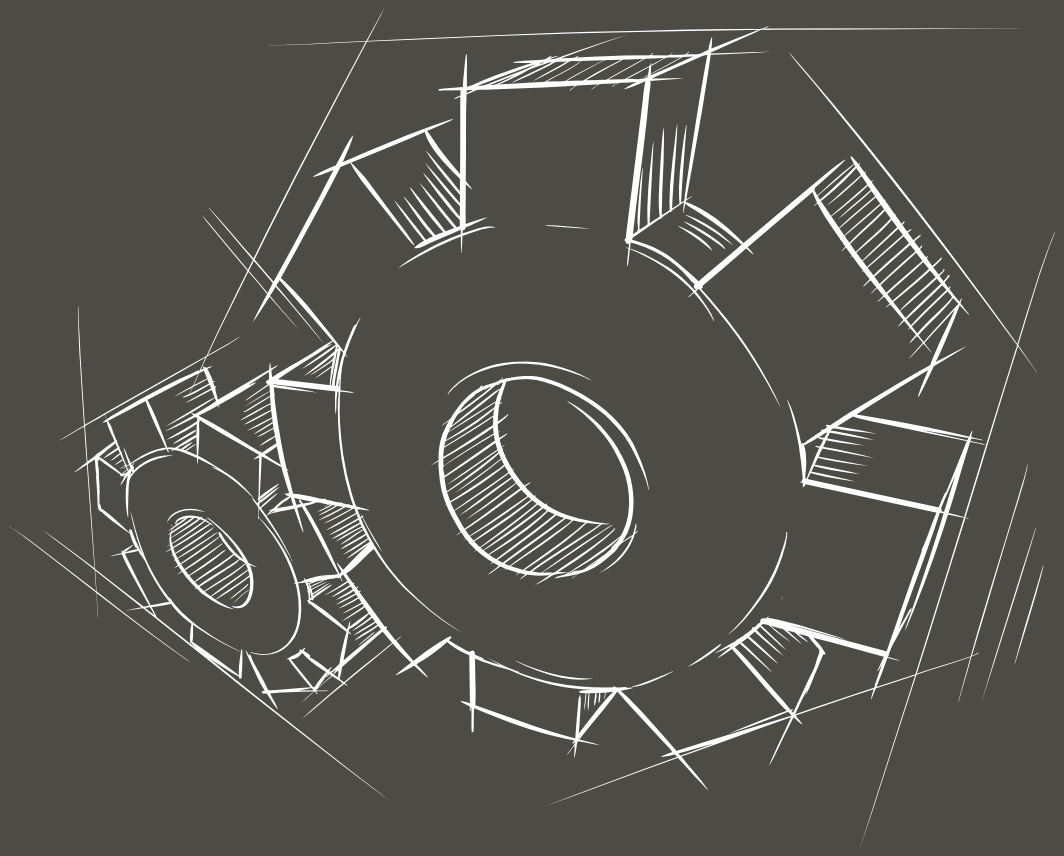
This has been a busy and productive summer at Vaughn, and we have been working hard to make improvements for students and faculty in terms of equipment, facilities and services. These improvements include new computers, upgraded computer infrastructure and bandwidth, space for the new teaching and learning center, and two new flight simulators along with a new simulator laboratory. All of these enhancements are designed to enhance the academic experience at Vaughn. Thanks to the funds provided by the federal College Cost Reduction and Access Act awarded last October, work has begun to transform some laboratory spaces in the historic part of the building. The Aviation Training Institute, the engineering and technology department and the aviation department have all been affected.

When students arrive in the fall, they will find that every computer used by a student at Vaughn has been replaced with a completely new computer infrastructure and increased bandwidth, allowing both students and faculty to connect to the resources needed to delve deeper into any given subject. The main hallway has been transformed with the movement of several laboratories to make space for a new academic support space for students. This bright and welcoming area allows students to have easy access to tutoring and room for small group work with faculty. We have also added a writing center and language lab.

Probably the most exciting new space is the flight simulator lab right outside of admissions, where two new Redbird flight simulators have been installed alongside the current Frasca 142. In October, Vaughn will take delivery of another Frasca 241, and this new lab will be complete with a fleet of four simulators.

This work is expected to be completed in time for the fall 2009 semester. These renovations are only the beginning—Vaughn has a commitment from the Federal Aviation Administration's noise abatement program to provide funds, along with The Port Authority of New York and New Jersey, that will significantly upgrade the outside of the original 1941 building as well as new windows, and upgraded heating, ventilation and air conditioning. That construction may start as early as next summer. A new library and student center/cafeteria are also planned and could begin mid-2010.

Fig. 01



Financial Summary, Demographics & Annual Fund REPORT

2007–2008

The information that follows is based on fiscal year 2007–2008 and includes financial information, demographics of students and the annual fund donor list.

Financial Summary Balance Sheet

(figures have been rounded)

	2008	2007
Total Assets	$60,062,000	$65,496,000
Total Liabilities	43,981,000	43,414,000
Total Net Assets	16,081,000	22,082,000
Comprised of:		
Unrestricted	15,950,000	21,968,000
Temporarily Restricted	34,000	35,000
Permanently Restricted	97,000	79,000
Total Net Assets	$16,081,000	$22,082,000

Revenues and Expenses

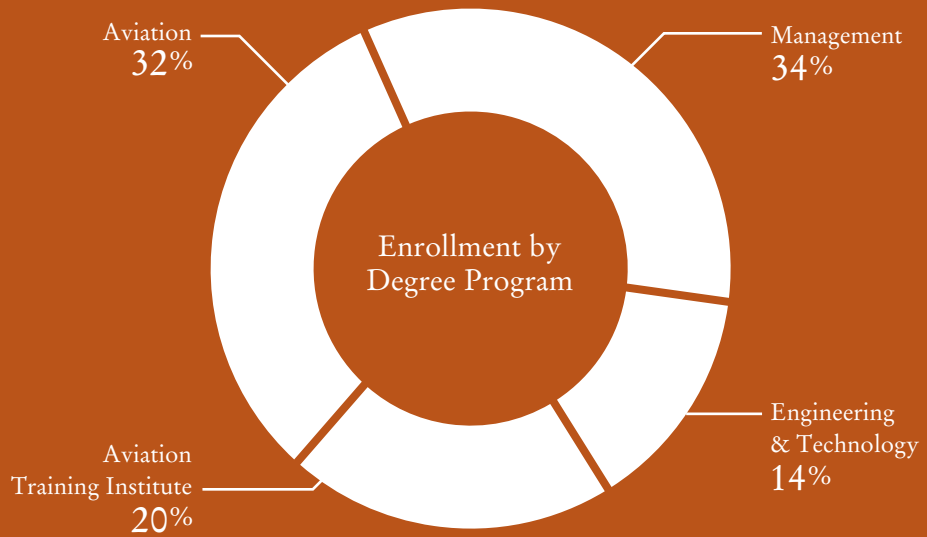
Revenues		
Tuition and Fees	$13,941,000	$12,732,000
Less: Scholarships and Fellowships	1,087,000	1,398,000
Less: Federal Aid	201,000	216,000
Net Tuition and Fees	12,653,000	11,118,000
Government Grants and Contracts	1,945,000	1,855,000
Contributions, Including Equipment	275,000	337,000
Investment Income	715,000	1,272,000
Auxiliary Revenue	536,000	0
Appreciation (Depreciation)		
In Fair Value of Investments	(1,202,000)	2,685,000
Other	111,000	87,000
Less: Loss on Defeasance of Debt	0	972,000
Total Unrestricted Revenues, Gains and Other Support	$15,033,000	$16,382,000

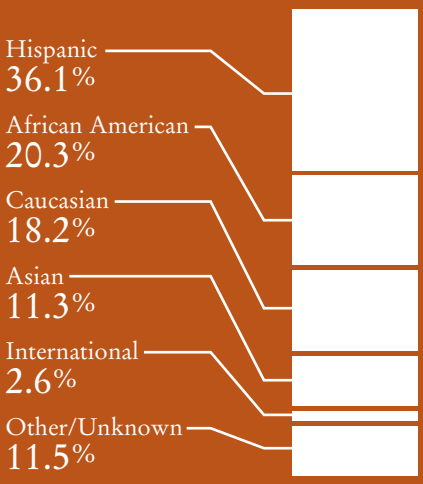
Expenses	**2008**	**2007**
Educational and General	$19,290,000	$16,518,000
Depreciation and Accretion	1,761,000	1,686,000
Total Expenses	21,051,000	18,204,000
Change in Unrestricted Net Assets	(6,018,000)	(1,822,000)
Increase (Decrease)		
In Temporarily and Permanently Restricted Assets	(17,000)	27,000
Change in Net Assets	$(6,001,000)	$(1,795,000)

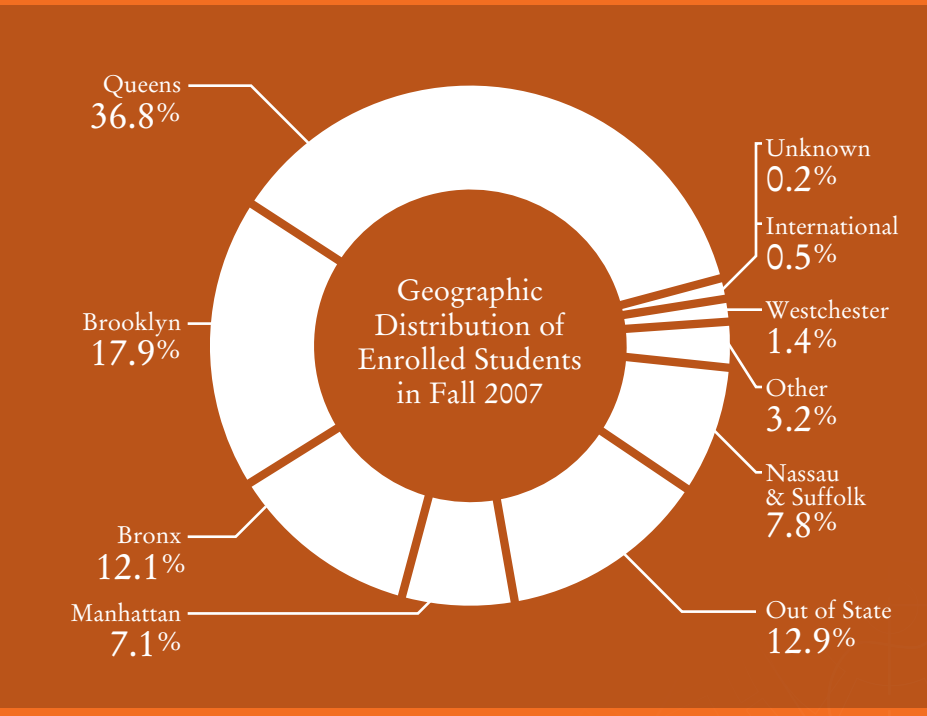
Aid Awards to Enrolled Students in 2007-2008

Scholarships and Grants	2008	2007
Federal Grants	$2,055,217	$2,029,105
State Grants	1,872,484	2,008,253
Institutional Grants	1,134,326	632,483
Scholarships From External Sources	99,596	138,168
Self-Help Programs		
Student Loans	3,381,142	2,827,121
Federal Work Study	124,391	103,497
Other		
Parent Loans	442,357	649,066
Total	$9,109,513	$8,387,693

Demographics
2007–2008







Enrollment by Gender

MALE 87.1%

FEMALE 12.9%

Annual Fund Giving
2007–2008

$100,000—$50,000

Elaine Asch-Root

Eurographics

$49,000—$10,000

Albert and Cecily Santoro

The Founders Club
$9,999—$2,500

Reno Angeletti ’53

Aviation Development Council

The Boeing Company

Theofanis Gavrilis ’69

John F. Kennedy International Airport Chamber of Commerce

Thomas McKee

Mr. and Mrs. Clyde Kizer

John P. Peraza ’60

RCM Technologies

Frank Rosenberg

Rebecca Scholl

Software Development Corporation

George A. Vaughn, Jr.

The LaGuardia Club
$2,499—$1,500

John and Deirdre Fitzpatrick

Monroe Hatch

Shelly and Jeff Kehl

The President’s Club
$1,499—$1,000

Susan M. Baer

Julian Earls

Thomas Marotta

Parking Company of America Airports, LLC

Morris Sloane

James W. Vaughn

Irene and Robert Zincone ’55

The Charles E. Taylor Club
$999—$250

Bank of America

Helene Brooks

Anne C. Crudge

Earl Dawson ’88

Sharon B. DeVivo

John Enders

George Hogg ’68

JFK IAT

Albert Longarini ’49 and Vincent Longarini ’85

Mary Vavruska

Robert Waldmann

Grace and Joseph Werner ’57

The Bessie Coleman Club
$249—$101

Philip and Phoebe Allen

Anonymous

Marc Churgel ’67

Arthur Johann ’82

Kalliopi Koutsoutis

Thomas Pape ’48

Martha A. Ross

Edward Sepulveda ’02

Ernie Shepelsky

Mortimer Sickles ’54

The Charles Lindbergh Club
$100—$51

William Adamo ’82

Cannon Consulting, Inc.

John Caulfield ’59

Charles Coder ’41

Douglas Eastman ’48

Louis Fazio ’59

Albert Feil ’53

Patrick Hamill ’71

Warren James ’02

Herman Jenisch ’40

Labor Management Concepts

Clarence Lohse ’49

Ronald Mower ’49

Louis Popovich ’51

Paul Salmaggi ’60

In Memory of Eugene Sniegocki ’50

Laurakaye Stewart

Joseph Tepedino ’75

James Tierney ’56

Robert and Elizabeth Wheeler

The Donors Club
$50 or less

In Memory of Rudy Batistoni ’41

Frank Carnevale ’89

Baye Coundoul ’07

Nicholas Evangelides ’49

Erich Frank ’84

Joseph Giamanco ’67

Robert Gensinger ’64

Henry Gross ’71

John Keilp ’49

William Marriott ’66

Michael McCarthy ’73

Lawrence Palmer ’66

Thomas Perno ’71

Mario Ramdial ’03

Robert Rath

Uriel Reid

Arthur Rosenberg

Walter Rommel ’96

Infinite Satterwhite ’07

Frederick Schlichtman ’49

Walter Smith ’58

Albert Schnur

Michael Torns ’07

John Tristani ’58

US Golf Association

Raymond Villanueva ’06

In Memory of Nicholas Zimo

Matching Gift Companies

Consolidated Edison Company of New York, Inc.

Entergy

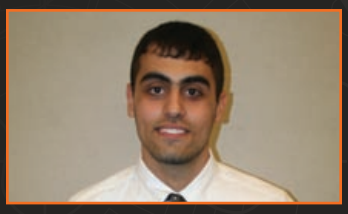
IBM

Annual fund donations provide for laboratory equipment, program development and scholarships. Below are two students who benefited this past year from financial support development and scholarships.

“The scholarship motivates me to work harder because it shows that I’m being rewarded for my work.”

SANDIP HODKHASA ’09

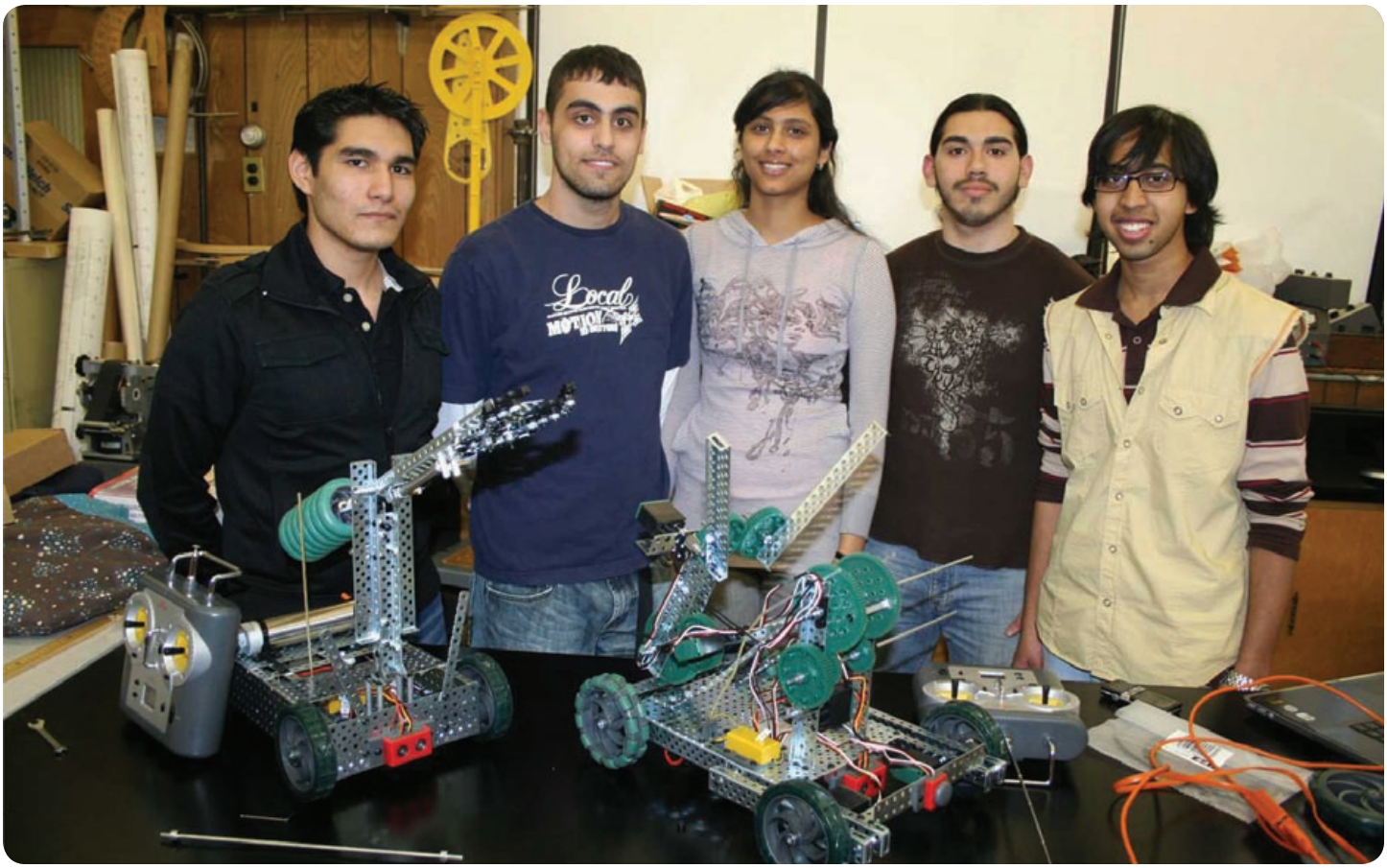
Attending Texas A&M University on a full scholarship this fall for a masters in mechanical engineering.



“A financial burden was taken off my shoulders as a result of my scholarship. I was able to use the money toward the cost of my books and other expenses.”

BRIAN LINHARES ’12

Features



Robotics Club Designs an Eco-Friendly Aid to Farmers

The newly established robotics club recently built a model of a "green" vehicle for use in the agricultural field.

Students pictured, (l. to r.) Jose Bonifaz '09, Brian Linhares (president) '12, Sehrish Butt (vice president) '12, Richard Lodestro '12 and Farhaan Rehman '12, built an actual-size vehicle before heading to the conference.

The model was a result of a paper that was accepted for presentation at the Seventh Annual Latin American and Caribbean Conference of Engineering Institutions, held the first week of June in San Cristobal, Venezuela. Designed to "smartly" pick crops, this robot specifically helps corn farmers.

Dr. Hossein Rahemi, chair of the engineering and technology department and advisor to the club, accompanied the students and presented his own paper, coauthored by Dr. Naveen Seth, chair of the management department, entitled *Student Learning Outcomes: An Integrated Continuing Improvement Process for Course and Program Assessment.* This paper has been published in the *Latin American and Caribbean Journal of Engineering Education.*

The robotics club students developed a "green" robot that is powered by solar energy, uses renewable materials and a motor-driven engine. Sensors with ultrasound and infrared rays are also vital components. The unique structure of this robot emphasizes the journey back to a green ecology without removing the role of the farmer.

Bringing High Technology to Basic Farming

The emerging field of mechatronics can serve as a bridge to bringing new methods to farming. Agriculture commenced with basic, handmade cultivating tools, then further advanced with power machinery, but we were unaware of the environmental

impact. To introduce mechatronics to farmers, the robotics club proposed that the farmers be given software and step-by-step visual aids to control robots through a control station. Included will be a handbook along with several interchangeable parts. Maintenance, installation and parts specifications will also be included to further stress the simplicity of using robots.

Anatomy of the Robot

With the use of laser sensors, the club members designed a robot that can accurately measure the height of the corn crops by scanning them in an angled projection. Whisker sensors are located on top of the robot with a rotating mechanism detecting the top height at the touch of the whiskers. This allows the robot to self adjust its height to the height of the crop.

The controls use global positioning systems (GPS). Pullers, blades and a conveyor belt inside the robot are the rotating systems grabbing, cutting and extracting the crops. The soil sensor panel collects and analyzes the soil, and the collecting mechanism holds the soil to analyze moisture content, vitamins, minerals and pesticide levels. Sniffer sensors on top of the robot extract air to measure the alcohol content in the crop and consider its ripeness.

Cameras are the robot's eyes out in the field, feeding visual imagery back to the control center. A two-cylinder engine attached to an accessory gearbox, solar panels and a back-up battery is the power system. The drive train wheels include two large wheels in the rear and two smaller wheels in the front. Each set is connected to a single motor.

The robot also utilizes gears to reduce the load on the motors. Attaching a gear with a greater surface area to the motor, and a gear of smaller surface area to the blade, increases the speed and reduces energy consumption. The solar panels also help decrease power consumption by distributing energy among different mechanisms and reducing emissions though the reduction of output from the engine.

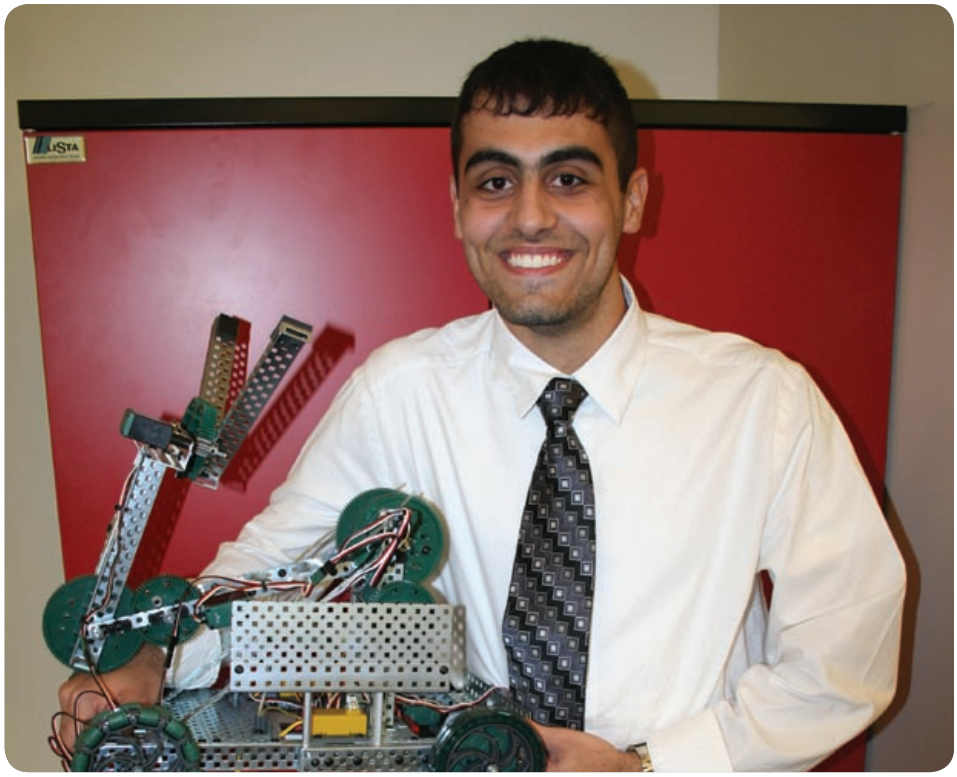
Cost-efficient parts, such as lumber and polyvinyl chloride (PVC), steel blades and an aluminum alloy chassis were also used. Lastly, the outside body consists of high tensile stress cloth, which is durable for the outside environment and holding the crops in a waterproof compartment.

Eco-Friendly and Efficient

The challenge in utilizing an autonomous robot composed of mechanical and electrical features is to maintain its ecological benefits. Using bamboo for the main structure of the robot not only takes strength into account, but also has beneficial attributes for the environment. Bamboo has a rapid growth rate that can reach up to almost four feet per day. Bamboo also generates more oxygen, takes in more carbon dioxide and requires less space in which to grow.

Competition Results

Vaughn's robotics students proudly placed third in the competition, and their model robot will be showcased on display at the College for all students to see and enjoy. The club has plans to participate in more robotics competitions and to grow the membership of the club. They have already inspired students who belong to the Society of Automobile Engineers' student chapter to begin designing a new fuel-efficient, ecology-friendly car.



Brian Linhares '12 shows off one of the club's robots.

Features

Two Redbirds Arrive on Campus and Take Flight Degrees to New Heights

For the last 13 years, Vaughn's Frasca 142 flight simulator has been a main attraction for current and prospective flight students alike.

While the Frasca offers a half-glass cockpit and can effectively train future pilots, it also left users planted firmly on the ground while maneuvering takeoffs and landings. Recent grant funding from the US Department of Education has allowed Vaughn to significantly upgrade the flight simulators on campus. Two motion simulators, the Redbirds, arrived in late spring, and a new Frasca is due in the fall. All four of these marvels are situated in a new flight simulator laboratory that showcases the excitement of aviation.

"These new simulators allow Vaughn to not only provide our current students with the latest equipment to prepare them for a career as a pilot, but they will also attract new students," said Vice President of Academic and Student Affairs Sharon DeVivo. "Whatever program you decide to pursue at Vaughn, you will want to take a ride in one of these amazing machines."

The Redbird, with its FMX motion platform, manipulates your sense of balance by simulating 40-degree roll, 50-degree pitch and 60-degree yaw motions. "These Redbirds will compliment our flight operations students by expanding their training options," said Domenic Proscia, chair of the aviation department. "By offering them a comprehensive suite of modern flight decks, our students will experience a completely new host of training scenarios and opportunities that will surely add to their flying experiences."

Redbirds have six monitors with wingtip-to-wingtip views for practicing circling approaches. The advanced instructor's software can be run from any Windows laptop or tablet PC, and the station allows the instructor to monitor and control weather conditions and possible equipment failures. The instructor can also quickly reposition a flight, pause a flight and replay a previously recorded flight. The Redbird has a vast terrain and airport database as well as a unique pilot key system. In fact, each student will receive a "pilot key" (a data drive) that will allow him or her to record lessons and replay them from any computer. These simulators are approved by the Federal Aviation Administration and allow students to log simulator hours necessary for licensing.

These simulators are approved by the Federal Aviation Administration and allow students to log simulator hours necessary for licensing.

In addition to the interior controls, adjustable pilot and copilot seats, instrument panel lighting and motion platform emergency stop button, the Redbird's capabilities can be further expanded with additional instrument controls, autopilot buttons, and aircraft check lists and indicators for airspeed and altitude monitoring. The interchangeability of the Redbirds allows Vaughn to simulate glass (with a Garmin 1000) or steam gauges, as well as several different aircraft, including a Cessna 172, a Baron 58 and a Piper Seneca IV.

Features

Meeting the Demand for Middle and High School Math Teachers With an Innovative Partnership

If America is to succeed in the global marketplace, then kindergarten through grade 12 education in science, technology, engineering and math is critical.

According to the American Society for Mechanical Engineering (ASME), 2.2 million new teachers will be needed in the next decade; however, the statistics indicate that US colleges will not meet the expected demand. Furthermore, graduates with degrees in science, mathematics, physics and engineering are unlikely to pursue teaching careers.

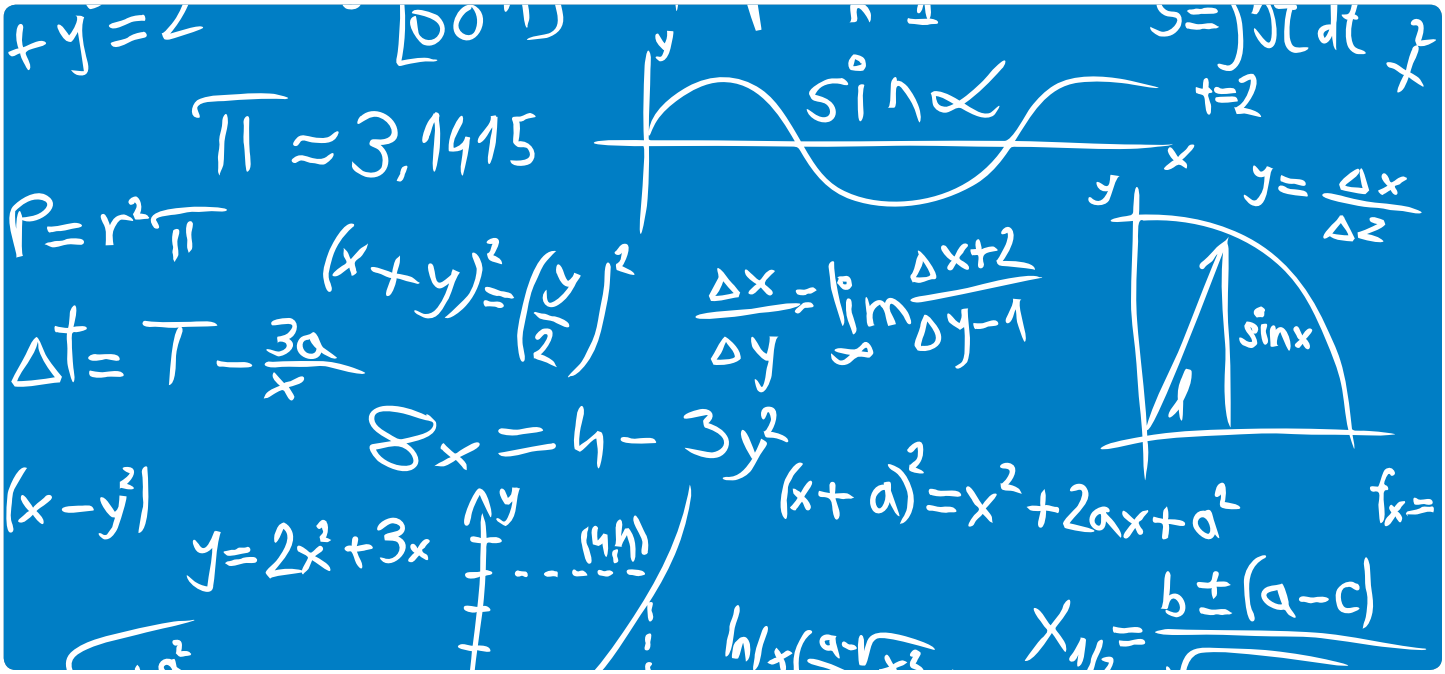
In New York City, the greatest demand is for math teachers. In response to this need, Vaughn College has partnered with Metropolitan College of New York (MCNY) to provide Vaughn graduates with a direct pathway to a graduate degree in education and a new career option. This partnership is funded by a grant from the US Department of Education under their Title V program.

The Teacher Education Pathways Program allows students to become certified to teach secondary math to middle- and high-school students in less time at a more affordable cost. The program enables students to:

- Earn a bachelor of science in engineering or engineering technology at Vaughn.
- Earn a master of science in math education from MCNY in one year. The three-semester, 48-credit program builds upon Metropolitan's proven approach to educating qualified teachers.

Students who already hold a bachelor of science in engineering or engineering technology are eligible to enter MCNY's one-year master's degree if they have taken the 10 prerequisite courses in math at Vaughn. Courses include calculus I and II, differential equations, probability and statistics, numerical analysis, multivariable calculus, discrete mathematics, linear algebra, geometry and complex variables. MCNY's program begins in September 2010.

This accelerated five-year program attempts to fill the overwhelming need for qualified teachers in one of the most in-demand fields. For more information about the program, contact Vaughn's admissions office at 866.6VAUGHN, or visit the Web site at www.vaughn.edu.



Departments

In Your Own Words

Erin Ritola ’06 Describes Her Unexpected Career Path

I graduated from Vaughn a few years ago with my airframe and powerplant (A&P) certificate and a bachelor’s degree in aviation maintenance management, which formed the basis for my aviation career at jetBlue Airways. It wasn’t until I was asked if I would speak about my career at the Women in Aviation Day annual event held at Vaughn that it dawned on me that I actually now have a career. Needless to say, I was thrilled with that realization, and agreed to speak.

Aviation became my field not by calling, but by opportunity. When I was in high school, it was apparent that I had what my guidance counselor called “mechanical aptitude” but I did not know what to do with it. In a senior-year meeting with my guidance counselor, we had a very dramatic episode in which both of us ended up in tears. I stormed out of her office after announcing that I wanted to be a lawnmower mechanic. Eventually, I figured out I had two realistic options: automotive mechanics or aviation mechanics. In the end, I decided that cars are all right, but airplanes could take me farther.

My academic career began at Vaughn in the Aviation Training Institute. While I was there, I began meeting people. My instructors were very willing to make introductions. Through them, I was granted an interview at jetBlue for an internship in the “People” (Human Resources) department, recruiting in particular. I went to the interview more nervous than I could ever recall, and actually told the recruiter that I wasn’t a “people” person. I left the interview thinking it was good experience, but not believing that I would actually get the job. It occurred to me that this position might be a good opportunity, because before this I could not imagine myself recruiting people.

Imagine my shock when I was offered the internship. At that point though, I was doubtful and was going to turn it down. This is when my support network jumped in and kicked me into action. Support networks are important. They can be made up of anyone who is close enough to you to have your well being in mind, and far enough removed to be able to see what you cannot. My support network is made up of my family, a few friends and now a couple of coworkers. They pushed me to give the internship a try. This was a big reach for me. I felt as though I was stretching myself much further than I could go. I accepted the internship with a couple of pairs of jeans, boots, and a handful of t-shirts making up the sum total of my wardrobe. I had to buy an entire new set of clothes to even make it through the door of jetBlue.

In recruiting, I discovered that I had more skills than I initially thought. I learned I am organized, nearly to a fault, and that I could apply some of the skills that make me a decent mechanic to processes. One project led to another, which led to a full-time position in recruiting as a technical operations recruiting specialist, and then to an offer for a position as an administrative assistant in the

Departments

crew support department, reporting to the director of maintenance.

The administrative assistant position was another leap for me, but I really wanted to work in the technical operations department

> "The best advice I can give anyone starting a career is to plan cautiously and make sure you are always learning."

and not continue to hire people for the very jobs that I wanted to have. Getting into the department proved to be a good move in the long run, but it was rough in the beginning. Eventually, I managed projects for the technical operations department, and most notably, became heavily involved in the apprentice maintenance technician program at jetBlue Airways.

Upon my graduation and successful achievement of my A&P certificate, I earned a position at jetBlue in the maintenance planning department. My primary responsibilities were to handle the scheduling of advisory directives, service bulletins, and engineering orders—basically any kind of major modification jetBlue wanted to do to its fleet. I was fortunate to have a manager in planning who gave me opportunities to expand my technical knowledge.

After about two years, a heavy maintenance controller position became available. However, I was very comfortable in planning and did not desire a move. It took another push from my support group who realized, long before I did, that I was becoming a little stagnant. I sat down and spoke with my manager, and we decided that the heavy maintenance controller position was a positive career move for me.

The best advice I can give anyone starting a career is to plan cautiously and make sure you are always learning. Make the decision to stretch yourself or put yourself in a situation where you are outside of your comfort zone because sometimes, even when you think you are moving in the wrong direction, you will turn around and realize you are right where you need to be. Keep your goals realistic and attainable—do not plan on being a manager in five years because that may not be realistic, and all that will do is frustrate you. Begin by gaining an understanding of your strengths and weaknesses and figure out what you really want in your career. Keep as many options open as possible and try to enjoy what you are doing in the moment while you build new skills. Finally, remember to work hard no matter where you are in your career progression and take pride in the work you do.

This is the first in a new series, *In Your Own Words*, in which graduates describe their time at Vaughn, how it influenced their current professional lives and offer advice for current students as they look toward their graduate or professional goals. To submit an essay, please contact Kalli Koutsoutis, executive director of corporate and foundation relations, at kalli.koutsoutis@vaughn.edu.

Departments

Alumni Update

2009

Anish Dharia will be attending Columbia University in the fall to begin a master's degree program in mechanical engineering.

Shawn Oosman will begin a master's degree program in mechanical engineering at SUNY Stony Brook this fall.

Sandip Hodkhasa heads to Texas A&M University for a master's degree program in mechanical engineering in September.

2008

Fahad Qureshi is a manufacturing engineer for Synthes USA.

Raul Telles is in the second year of his master's degree program in aerospace engineering at Virginia Tech.

2007

Shawn Campbell is in training with the Federal Aviation Administration in Oklahoma City to become an air traffic controller. He hopes to be working at the Will Rogers World Airport in Oklahoma City as an airport operations officer.

2006

Vinicio Feliz is working as a Wall Street broker.

Javier Jimenez is an intelligence analyst for the Defense Intelligence Agency at the Pentagon in Washington, DC.

2005

Yougashwar Budhoo is teaching material science and machine design to Vaughn students while pursuing his PhD in solid mechanics engineering at City University of New York.

1973

Michael J. McCarthy is a senior maintenance contractor for Atlas Air.

1975

John A. Foderaro is a retired science teacher.

1959

Allen Hegelen is retired from US Government Civil Service. He also served in the United States Air Force.

IN MEMORIAM

1992

Georges Fanfan

1982

Joseph Poplawski passed away in 2007.

1974

Frederick Hook

1953

Richard G. Murphy passed away on December 31, 2008.

1954

William R. Hopkins passed on February 11, 2009.

Send us Your News!

Recently married, promoted or relocated? Started your own business or switched career fields? Added a new member to your family? Share the good news with your friends, professors and classmates at Vaughn—we want to stay connected!

E-mail your news to:
Kalli Koutsoutis, Executive Director
Kalli.koutsoutis@vaughn.edu

Or mail to:
Alumni Association, Vaughn College
86-01 23rd Avenue, Flushing, NY 11369

Departments

Spring Highlights: Women in Aviation Day

Sponsored by the Vaughn student chapter of Women in Aviation-International, this annual event was held during the spring semester in celebration of Women's History Month.

Three dynamic guest speakers shared with Vaughn students, faculty and staff the paths they took to their career success, as well as the challenges they faced along the way.

(l. to r.) Dr. Maxine Lubner, Linda Sollars, Captain Linda M. Orlady and Erin Ritola '06 share their advice with Vaughn students.

Erin Ritola '06, whose story appears on the previous pages, and Linda Sollars, a pilot for jetBlue Airways and a Vaughn adjunct faculty member in India, spoke to the group about their experiences. Captain Linda M. Orlady, a captain for United Airlines and the newest member of Vaughn's board of trustees, is currently flying B-757s and B-767s. She inspired fledgling pilots to, "recognize that you have to learn the ropes and embrace the challenges, because the field of aviation is an active, dynamic process."

Management Professor Dr. Maxine E. Lubner, who teaches for the graduate and undergraduate management programs at Vaughn, has more than 20 years' experience as an aviation professional. She has a private pilot's license and enjoys teaching students about the human factors facing pilots today, such as environmental and safety issues. Her advice to those who want a career in aviation: "Follow your heart and become what you truly want to be, for you will have a happy and fulfilled life."

Spring Highlights: Two of Vaughn's Faculty Share Their Careers During a Day at Sea

Management faculty members Maxine Lubner and Adjunct Alice Chan were invited to speak at the Intrepid Museum during Women's History Month. Recognizing the female contribution to aviation throughout history, visitors of all ages had an opportunity to learn about the forces of flight: lift and drag, thrust and how a plane flies.

Lubner spoke about the challenges aviation faces with the next generation of air traffic control though the use of satellites, as well as safety issues and the human factors involved in flight. Alice Chan, an aviation attorney, focused her talk on aviation law and the roles of the Federal Aviation Administration and other regulatory agencies that ensure the safety of air passengers.

Departments

Spring Highlights: American Association of Airport Executive Annual Luncheon

The Vaughn student chapter of the American Association of Airport Executives (AAAE) held its annual luncheon this spring with guest speakers from the world's largest airport system. Director of Aviation for The Port Authority of New York and New Jersey William DeCota discussed the challenges to growth at the region's three major airports, John F. Kennedy International, Newark Liberty International and LaGuardia Airports. DeCota has received numerous awards over the years for his lifetime commitment to the aviation industry. Vaughn College awarded him a honorary doctoral degree at its convocation ceremony in 2006.

Other speakers included Kevin Breech, manager for The Port Authority's aviation technical services division, and Mahendra Ragubeer, a 2001 graduate of the College who serves the eastern region of the Federal Aviation Administration as the airports compliance manager and airport certification safety inspector.

The general managers of all three major airports, as well as Deputy Director Susan Baer (also a member of Vaughn's board of trustees) were also in attendance and students had a unique and valuable opportunity on that day to meet and talk with all of them.

Federal Aviation Administration's 32nd Annual Regional Airports Conference

In March, Salah Alsaedi '09 and Michael Goetz '09 were selected to attend the Federal Aviation Administration's 32nd Annual Regional Airports Conference in Hershey, PA.

This annual conference is designed for those who are involved in airport operations, management and fueling. Those who attended included airport planners, airport designers, industry consultants and contractors, people employed in construction material laboratories and pilots. Topics included airport mix design and testing requirements, as well as management issues. Alsaedi and Goetz appreciated the opportunity to hear leading aviation administrators address the issues facing the industry over the next few years.

Vaughn College has transformed over the last decade with new degree programs, residence hall and laboratory equipment. We need your support of the annual fund to continue the transformation. Please make your contribution at www.vaughn.edu/alumni/contribution

VaughnCollege
of aeronautics and technology
86-01 23rd Avenue | Flushing, New York 11369

Vaughn's Intercollegiate Star: Mahdi Macbahi '12 Makes the All-Conference Basketball Team

Mahdi Macbahi '12, a freshman in the aviation maintenance degree program at Vaughn, joined the Warriors as a first-year basketball player and was named to the Hudson Valley Men's Athletic Conference All-Conference Team. This is also exciting as it is Vaughn's first year competing at the intercollegiate level in basketball.

Amazingly, Macbahi has only been playing for the last few years, learning the game at his Long Island City high school. During this year's season with Vaughn, he was a ferocious rebounder, averaging 10 points per game and seven rebounds against such teams as St. Joseph's, Sarah Lawrence, Webb Institute, Daniel Webster, Berkeley and Pratt Institute.

According to Warriors Coach Amy Mulligan, "Macbahi has been amazing to watch, not only as a basketball player, but also as a student." She is excited that he will be with the College's team for the next few seasons and says, "I can't wait to see his future accomplishments as one of Vaughn's best basketball players."