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Standing behind student success

How applied research can contribute

Defining success

What students have to say



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Q&A

A few minutes with... Lane Trotter

- **Q.** In your previous job as Dean of the School of Transportation at the British Columbia Institute of Technology (BCIT), you were involved in a number of innovation-related initiatives. Of all the things you achieved there, of what are you most proud?
- A. There are a variety of projects that I am very proud to have been associated with during my time at BCIT. The ones that come to mind are related to the development of partnerships with other educational institutions and with industry. Some of these projects include the creation of high school partnership agreements with school districts that resulted in postsecondary programming being delivered in high schools around the province of British Columbia so that students could graduate with their high school diploma and either a BCIT post secondary certificate or the completion of the first year of a two-year diploma. These dual credit programs provide opportunities for young people to pursue advanced technical training and created a bridge between both the K-12 and postsecondary systems. Other projects that come to mind are the development of partnerships agreements with industry that resulted in the implementation of cutting edge industry practice within the curriculum of various programs within the School of Transportation and in significant industry donations such as a 737 [aircraft], state-ofthe-art avionics equipment, a locomotive, cars and other pieces of equipment that BCIT would not have been able to otherwise acquire. All of these relationships were based on building ongoing relationships. However, the biggest project that I was involved with at BCIT was the design and development of the \$77 million Aerospace Technology Campus that opened in September 2007.
- Q. How did your prior experience help shape your philosophy about engaging students in applied research and innovation projects (AR&I) with the private sector?
- A. The colleges have a different history than the universities. The universities only took on

a role in research after the restructuring of the German universities under the Humboldt model in the 19th Century. Before this, the main role of the universities was teaching. However, the Humboldt model became the basic template for the modern university where there was research, teaching and public service. The college system has a very different history. The colleges were created to be engines of economic development that trained and educated people for technical occupations. Since its creation, the college system is evolving and becoming much more sophisticated. Part of the evolving mandate of the colleges has become applied research. This term sometimes causes our colleagues in the university system concern since they see this as potential overlap with one of their three core competency areas. However, the reality is that college research is different than university research. University research tends to be interest-based research that expands the bounds of knowledge, which can be characterized as innovation in knowledge. College research, on the other hand, is based on solving practical problems, it deals with immediate issues and looks for solutions. This type of research can be characterized as innovation in practice since it is designed to look at improving both efficiency and effectiveness issues. In many ways, the colleges have been involved with this from our creation, but we had not previously thought to capture and define what we did in this manner. But it is clear that this approach is gaining more attention among both government and industry since it is linked to maintaining our economic competitiveness.

Q. How do you see AR&I fitting into colleges' traditional role of educating students?

A. The innovation agenda relates to experiential learning and problem solving. These are the types of skills that employers are after. Many of our programs already have strong experiential learning components integrated either in the curriculum or in the program structure. Applied research is now being thought of more consciously so that the curriculum has project-based challenges for the students to solve. As well, different areas of the College are looking at pursuing interprofessional education as a means of building transdisciplinary practice that improves the skills, abilities and knowledge of our students.

Q. Do you think the inclusion of AR&I as part of students' hands-on learning will require a shift in thinking and College culture?

A. As I mentioned earlier, in some ways the colleges have been involved with applied research and innovation since their inception. However, the activity that was being done was never classified as applied research or innovation. Now that we are aware of what applied research is, we can better classify it and recognize that activity. However, there are opportunities for growth but these are constrained by capacity issues around funding, facilities and human resources. In this sense we are still in the initial bootstrapping since we have to develop internal systems and structures that allow us to have the capacity to pursue applied research and innovation.

Q. How do we begin to introduce AR&I into curriculum?

A. Applied research and innovation has to be imbued into the core foundation of the curriculum; it cannot be bolted onto the side of the program. As well, these types of changes take time and what works in one area may not be appropriate in another area. But to be successful, it requires champions who will support the applied research and innovation agenda.

Lane Trotter is Fanshawe's Senior Vice-President Academic Services. Prior to joining Fanshawe in February 2009, Trotter was Dean of the School of Transportation at BCIT, where he provided leadership to the aerospace, marine and motive power divisions and led a team that developed the education and business plans for BCIT's \$77 million Aerospace Technology Campus. Previously, he held positions with the B.C. Ministry of Education and as dean of three major academic areas at St. Clair College in Windsor, Ontario.

newsflash

New centre for energy and environments supports growth of regional green industry



Greg Weiler (fourth from the right) Fanshawe's Dean of Applied Research & Innovation, poses with Minister of State for Science and Technology Gary Goodyear (fifth from the left) and Dr. Suzanne Fortier (far right), President of the Natural Sciences and Engineering Council of Canada (NSERC), at the official announcement of the latest round of CCI grants. Also pictured are representatives from other recipient institutions Algonquin College, Red River College, Seneca College, the Southern Alberta Institute of Technology, Cégep de l'Abitibi-Témiscamingue, Cégep de Rimouski, Cégep de Saint-Jérôme and Cégep de Trois-Rivières. The awards were announced at Seneca during the annual Polytechnics Canada conference. Photo courtesy of NSERC.

Environmental technology and renewable energy companies will be able to turn to Fanshawe College for help with applied research and development projects thanks to a \$2.3 million grant from the federal College and Community Innovation Program (CCI).

The College will use the five-year grant to bring existing projects under a new Centre for Sustainable Energy & Environments (CSEE). CSEE will be the umbrella for a series of environmental projects aimed at optimization, adoption, integration and commercialization of renewable energy and recycling technologies.

"CCI funding will allow Fanshawe to support the growing number of local companies in an important emerging sector, and help build a green energy sector in our region," said Fanshawe President Howard Rundle. "Not only does this align with our strategic directions and strategic applied research plan, it also provides our students with invaluable experience from participation in hands-on innovation projects with industry, and the knowledge gained will become part of our curriculum."

The College will be actively seeking partnerships with the private sector to add other projects to CSEE, says Greg Weiler, Dean of Applied Research, Innovation & University Partnerships (ARIUP) and holder of the CCI grant. This will expand innovation activities currently offered by the College through its membership in the Colleges Ontario Network for Industry Innovation (CONII), he said.

CSEE was one of nine CCI funded projects announced November 27, 2009 by the Hon. Gary Goodyear, Minister of State (Science and Technology). The projects were chosen following a national, peer-review competition. Eight multi-disciplinary projects have initially been identified for CSEE and involve Fanshawe's faculties of Technology and Arts, Media and Design. ARIUP will administer the centre itself. Projects include:

- A better battery recharging system and efficiency enhancements for solar-powered small utility vehicles;
- Solar power station optimization/algorithm to transfer solar power to the Ontario energy grid at peak times;
- Improved solar power collection and power storage systems;
- Improved solar array efficiency;
- A solar powered de-icing system for parking garages and other concrete infrastructure;
- Solar awnings and blinds;
- A more efficient wind turbine;
- Use of composted organic waste and by-products to grow food and plants in greenhouses.

CSEE also is supported by in-kind contributions and funding from the College and its partners. Partners include: TRY Recycling Inc.; Decade Group Inc.; architects Tillman Ruth Mocellin; London Hydro; Virelec Ltd.; Vital Group Inc.; the London & District Construction Association; Suntastic Hothouse/Huron Produce Inc.; and A&L Canada Laboratories; the Ontario Centres of Excellence; and the Ontario Research Commercialization Program.



CONII2 builds on successful company, faculty, student collaborations

Businesses can continue to rely on Ontario colleges to help them innovate as institutions prepare to roll out the second phase of a program that assists firms with hands-on applied research, technology transfer and commercialization. "The overall success of the Colleges Ontario Network for Industry Innovation (CONII) pilot shows that faculty and company expertise plus students can equal a winning team for Ontario innovators," says Greg Weiler, Fanshawe's Dean of Applied Research, Innovation and University Partnerships and a member of the original and CONII2 steering committees.

Based on the successful pilot program and \$10 million (over three years) in new funding announced by the Ontario Ministry of Research and Innovation earlier this year, the soon-tobe rolled out Network for Innovation and Entrepreneurship, known as "CONII2", not only will help small and medium-sized businesses (SMEs) that cannot easily conduct R&D themselves, but is timely given the recession and pressing need for economic diversification in regions that have suffered massive job and business losses in traditional industries, Weiler says.

CONII was founded in 2006 to help companies harness institutional resources and faculty and student expertise in order to solve applied research and innovation-related problems, access funding, facilitate technology transfer, expand markets and commercialize new products, processes and services. Working through a network of College Industry Innovation Centres (CIICs), CONII has, to date, collaborated with 415 businesses on 143 industry-led applied research projects that have involved more than 2,000 college students. This vastly exceeds the group's original estimate of participation by about 100 students and companies.

Projects undertaken so far by original members – Algonquin, Centennial, Conestoga, Fanshawe, George Brown, Humber, Niagara, Seneca, Sheridan and St. Clair colleges – range from specialized software for 3D video games to a new machine to shell black walnuts to improved HVAC/ energy control systems for high-rise buildings to enhanced home medical monitoring equipment. At Fanshawe, CONII projects have focused on environmental technologies and renewable energy, primarily solar and wind. A number of projects are currently underway or in development, Weiler says.

Businesses access the CONII network through the CIIC at their local college. The college may assist the company itself or draw upon resources and expertise of the whole network in order to meet the client needs. Institutions also offer access to innovation-related business services. For example, Fanshawe's Community Consultancy program, run by the Lawrence Kinlin School of Business, can conduct market research and feasibility studies for companies and help them develop business, marketing and communications plans, create market entry strategies and design traditional and Internet-based marketing campaigns.

"In CONII2, Fanshawe plans to continue to do what it can to help business and industry and other stakeholders revitalize and reinvigorate the post-recession economy of Southwestern Ontario," Weiler says.

For more information, contact the Fanshawe CIIC at conii@fanshawec.ca.



New VP External Relations joins Fanshawe senior management

Bryan James (Jamie) Mackay, a long-time presence on the Ontario postsecondary education scene, has been appointed Fanshawe College's new Vice President, External Relations.

VP External Relations Jamie Mackay

"This is an exciting and an important day for Fanshawe College," said Fanshawe president Dr. Howard Rundle in making the announcement.

"With our new Vice-President, External Relations selected, we are now positioned to work more effectively with governments at all levels, and to pursue partnerships that will make a huge difference for our students. I look forward to seeing the results that Jamie Mackay's leadership will produce."

Mackay will be responsible for strengthening relationships between the College and all three levels of government. He will support Fanshawe's mission through advocacy with government and will champion community colleges, and in particular, Fanshawe College, on committees with external stakeholders. His portfolio includes the Centre for Applied Research, Innovation and University Partnerships (ARIUP) and the Marketing and Communications and International Partnerships departments.

Previously Mackay was Vice-President of Policy and Analysis at the Council of Ontario Universities (COU) where, throughout his six-year term, he supported Ontario's universities in data and policy analysis as part of their provincial advocacy. In addition to preparing submissions for the Rae Review of postsecondary education in Ontario, he consistently lobbied for increased funding, better student assistance, faculty support, and infrastructure renewal on behalf of universities across the province.

In 2003, he served as Executive Director of the Ontario Universities Application Centre as it successfully processed applications for the "double cohort" of high school graduates. Prior to joining COU, Mackay held several key administrative positions with the Government of Ontario, most recently (1996-2002) as Director of the Universities Branch of the Ministry of Training, Colleges and Universities (MTCU). In that role, he provided leadership in establishing the province's SuperBuild infrastructure program and developed the Key Performance Indicator benchmarks for the university sector. He also was Director of MTCU's Student Support Branch (1993-1996), Corporate Services Branch (1992-1993), and University Relations Branch (1989-1992).



The New York Times and the AP answer Fanshawe's CALL

Bruce Headlam, (left) new media editor at The New York Times and Laurie Morris, Deputy Director, Corporate Communications for the Associated Press, were the keynote speakers at this year's annual CALL (College Association for Language and Literacy) Conference, hosted by Fanshawe

Bruce Headlam and Laurie Morris

College in late May 2009. Headlam and Morris addressed an audience of about 70 college teachers on trends and developments in new media, electronic communications and newspapers.

Headlam, a native of Elmira, Ontario and a University of Toronto graduate, began his career at Saturday Night magazine, helped relaunch Canadian Business and has written for The Times Magazine and Slate. U of T and Humber College public relations graduate Morris, born in Brampton, Ontario, worked as a publicist for CBC's The Journal, was promotions and communications manager for Canadian Business and helped launch the Word on the Street, Canada's largest book and magazine festival.

CALL provides professional development opportunities for English and communications faculty and promotes standards in the teaching profession aimed at furthering students' language and literacy skills. Conference participants heard from speakers on topics ranging from the use of technology in communications to techniques for improving retention in writing upgrading courses to the aboriginal worldview on literacy.

The conference was organized by Fanshawe professors Calum Cunningham (also CALL president) and Dana Morningstar and was sponsored by the School of Language and Liberal Studies.

Fanshawe receives SSHRC approval

Fanshawe College researchers are now eligible to apply for grants from the Social Sciences and Humanities Research Council of Canada (SSHRC). The decision to award full eligibility to the College means that Fanshawe researchers will be able to apply as principal investigators to SSHRC programs for which colleges are eligible, since the College can now administer SSHRC grants. The decision comes following submission of a 140-page eligibility application last fall. SSHRC is one of the three major federal granting councils – together known as the Tri-Council – that fund billions of dollars of research at universities and colleges annually. Fanshawe already has eligibility status from the Natural Sciences & Engineering Research Council of Canada (NSERC).

For more information on SSHRC and other applied research funding opportunities, contact the Centre for Applied Research, Innovation & University Partnerships at research@fanshawec.ca or by telephone at (519) 452-4430, ext. 4734.



The International Club has an executive and several staff advisors. Pictured are (back row from left): Beverly Haggerty, Mohammed Majdi Abuyounis, Manishkumar Anjani (Events Coordinator), Hanwook Jung (Treasurer), Elisa Melo (Vice-President), Jan Barton (Communication Advisor), Tuyen Nguyen, Rayan Iskandarani and Amani Radhaa. Front row from left: Nicole Cosby, Heeresh Ramdhunee (President), Bo Zijun and Ibrahim Yamani.

CLUB BRINGS THE WORLD CLOSER TO FANSHAWE STUDENTS

A global village.

New communications and transportation technologies have, in the words of the famed researcher Dr. Marshall McLuhan, truly made the world "a global village", and an understanding of that world is considered key to the future

When students from all over the world come together and "realize they like the same stuff", they learn that, fundamentally, people aren't that different after all, Radhaa says. success of today's postsecondary graduates. A new program that brings together international and Canadian students is helping foster that communication.

The International Club, run by Fanshawe's International Partnerships department, offers Canadian and international students the chance to connect, build understanding and learn about each other's cultures and perspectives, says Amani Radhaa, Student Event Facilitator.

Created by staff in early 2009, the program began as a venue for social events for international students. Increased interest by both international and Canadian students led to a growing membership (about 200 members to date) and to the development of a peer mentoring program and

connections with other College clubs. The International Club holds monthly meetings and hosts themed, bi-weekly potlucks that showcase a particular country, its cultural traditions and its food. Students from that country host the potluck, and all cultural and religious festivals are observed. Currently, there are about 600 international students enrolled in Fanshawe's postsecondary and English as a Second Language programs.

When students from all over the world come together and "realize they like the same stuff", they learn that, fundamentally, people aren't that different after all, Radhaa says.

International Student Advisor Kim Rowe says international students are not only enthusiastic about sharing their cultures and traditions with Canadians, but are eager to learn about Canada and Londoners.

For example, club members work with the Fanshawe Student Union to identify and participate in volunteer opportunities with local charitable and community organizations in order to increase their social skills and knowledge of Canadian society.

Plans include the development of workshops for the College community.



What students have to say about "student success"

Photo story by Karrie Burke, Joni Easveld, Justin Pereira and John Sing

Student success is a widely-discussed topic these days. To find out how students feel about it, researchfanshawe magazine enlisted the help of a team from Marketing & Corporate Communications to conduct a random - and decidedly unscientific - survey of Fanshawe College students. Here's what the students had to say in response to the question:

What does success mean to you?



"Success is just doing the best you can, getting good marks and getting a good job after school. Getting a good job that I'm happy with that will help with my career." D'Metri Phillip, **Civil Engineering** Technology



"Success in my program is redeveloping our communities in Canada,

reorganizing and making up for our mistakes. After I graduate, doing my first successful plan, having a future community established that is environmentally friendly and a community that people want to live in would be my first successful task. Then, eventually making my way up and having my own business." Eric Loewen,

GIS and Urban Planning



"Success to me is learning professionalism, having the right skills to perform our assessment and treatment while getting the patient to the hospital. Also being able to have the mentality to be a lifelong learner. To be successful, a job would be nice but that probably won't happen right away. I would say after my first call if everything goes well and the doctors and patient are happy then that's all I want is to know how to do my job." Cory Liverance, Paramedic



"Being able to pass the course and coming out with an education I can use in the future. Success would be achieving my goal of becoming a CSI and being out there in the police force, helping people and solving crimes."

> Joy Leo, Police Foundations



"Success to me is finishing your program, starting your life and continuing your future career. [Success would be] if I get employed soon after my program is finished."

Keith Panamick, Construction Engineering Technology (Management)



"Success means to me getting a job, starting my career after I graduate, actually getting the information I need and the education I need to get a job in the field. I'd be successful if I learn enough to go to school and

come out with a degree and a job". Lisa Caverley,

Broadcast Television - Digital-Post Production





Passion and purpose drive Fanshawe investigator's applied research

Dr. Robert McEwan is passionate about student success.

By Leslie McIntosh

faculty member in Fanshawe College's Counselling and Accessibility Services since 1999, he helps students with learning challenges use assistive technology and develop strategies to overcome learning problems.

Twenty years ago the education system did not recognize people as having unique learning styles, McEwan says. And although students with learning challenges were often very intelligent, they could have significant problems coping in a traditional academic environment. That observation led McEwan to undertake a special applied research project as a member of Fanshawe's Millennium Centre to study whether assistive technology could help apprentices succeed. Data showed that apprentices who received assistance were more likely to complete their in-school training than students who did not get help.

Today, the University of Toronto-trained educator is involved with two major, externally-funded applied research projects that focus on vulnerable learners, essential skills, and students with psychiatric disabilities. In fact, he says he is more engaged in research today than he was while working on his Masters and PhD degrees.

McEwan is a co-investigator in a project lead by Alberta's Bow Valley College that includes Fanshawe and the Canadian Virtual College Consortium (CVCC). Funded by a \$3 million grant from Human Resources and Skills Development Canada (HRSDC) in 2008, the 36-month project focuses on using an online approach to teaching essential skills to help vulnerable learners – people with learning disabilities, without much formal education, without computer or technology experience or second language speakers – improve their essential skills through distance learning. Students participating in the project include unemployed adults, aboriginal students and workers from such sectors as trucking and the oil patch. Although McEwan's initial role was to help integrate assistive technology into the learning process, it quickly became more than just an exercise in hardware and software.

"What we realized right off the bat is that the human element is every bit, and likely more than 50%, important in this. You can provide the technology and that's wonderful, but unless you somehow develop a personal contact with people, it's not going to work. What we are doing now is using videoconferencing to compensate for the human element."

Each student receives a learning package that includes a net book. When students turn on their computers they receive personalized greetings that welcome them to the program, explain how it works and what they will learn. Students obtain help via the use of webcams for videoconferencing.

The use of the recently-invented net books represents a unique and promising innovation in distance education, McEwan says.

This work is being complemented by similar work now underway at Fanshawe where apprenticeship teachers and apprentice educational assistants help apprentices with notes, create videos for YouTube, and provide online tutoring via webcams. Funded by Services for Apprentices With Disabilities (SAWD), a new Ontario government program, this work addresses the low pass rate for Certificate of Qualification exams in some trades, where many apprentices fail and have to repeat portions of their in-school training.

Begun by the School of Motive Power Technology, this initiative has expanded to include apprentices in the cook, personal support worker and early childhood educator programs. McEwan has been involved in the development and implementation of the program, along with faculty and staff in the schools, and says the initiative is "showing really good potential for individual students."

"Many apprentices have difficulty with the academic part of their training because we test them on how well they *communicate* what they know, not on what they *actually* know. When they are asked to change the oil in a vehicle, for example, they can go into a shop and change it. But we ask them to write down step-by-step – using proper English grammar – on how they changed the oil. In the real world, they don't have to do that. So often, the academic world is an atypical one for them," McEwan says.

Apprentices need just-in-time learning that coincides with what they need to know for the workplace, and this new program "is a really exciting approach to learning and a promising way to improve student success."

Students with psychiatric problems often face significant barriers in the postsecondary education system. Those who suffer from anxiety, self-image or social issues may not relate well to classmates, deal with school bureaucracy, or generally cope well in a system designed for students with fewer life challenges.

"If we are going to improve student success, our actions should be based on evidence. There needs to be a way to test out ideas to see if they work."

"The problem with mental illness is that it doesn't coincide with the academic calendar. If a student becomes sick in November and has to spend December in hospital, there is no flexibility in the system. The student has to come back and start over again the next September, pay again and repeat everything already learned," McEwan says.

Led by LEADS Employment Services, a non-profit employment and skills agency that serves the disabled, McEwan is working with the Canadian Mental Health Association and Dr. Abraham Rudnick (a University of Western Ontario professor and Physician-Leader in the schizophrenia program at St. Joseph's Regional Mental Health Care), to use case studies to examine systemic barriers within postsecondary education. The purpose of the research is to identify issues and barriers to success for students with psychiatric problems, and develop models to support them in school and on the job.

In addition to acquiring knowledge that benefits students, the college and its employees benefit greatly from the development of strong, interdisciplinary community partnerships, he notes.

While the postsecondary educational system focuses intently on student success, many practices, policies and procedures do not easily lend themselves to that goal, McEwan notes. What has driven him to do research is a belief that an evidence-based approach to problem-solving is a key to helping educators help students.

"If we are going to improve student success, our actions should be based on evidence. There needs to be a way to test out ideas to see if they work," says McEwan, who adds that applied research is crucial to the gathering of that evidence.

Innovation activities can support student success



Innovation activities can help even the busiest College department provide an enhanced level of service and help improve student success, says the manager of Counselling and Accessibility Services.

Lois Wey

"While having staff engage in applied research may present some

challenges to managers, the benefits - in terms of morale, the community and our students - outweigh them," says manager Lois Wey.

Counselling and Accessibility Services currently provides services to more than 1,600 students with documented disabilities. The department is seeing many students with more complex disabilities, including an increase in mental illnesses. There also has been a huge increase in the number of mature students who have different issues than their younger classmates, Wey says.

Despite the large increase in workload, she supports staff that choose to engage in innovation projects. Dr. Robert McEwan, Shelley Reynolds and Shirley Porter have all undertaken both internally and externally funded projects in fields related to their jobs.

Among the other benefits the department has seen is an increase in partnerships with the community, other academic institutions and other service organizations. The knowledge gained from applied research such as McEwan's project with LEADS Employment Services, The University of Western Ontario and the Canadian Mental Health Association on students with psychiatric issues has allowed the department to successfully place students into paid employment. Porter's investigation of emotional supports for paramedic students, undertaken in conjunction with Fanshawe's paramedic program, has led to better supports for students preparing for paramedic careers. Reynolds and McEwan's work on learning styles has led to greater understanding about how individual students learn.

Wey points out that enhancing the department's services can contribute to increased access, improved student retention, and a higher employment rate for graduates. It also addresses Fanshawe's community focus, and helps raise the profile of the College.

"We are always looking for new ways to better help students, and the additional dollars we get from doing projects helps us innovate and explore new ways to support them. Applied research and innovation brings richness to what we do. It gives us the resources beyond traditional college funding to increase our services and add value to our operation," she says.

WRIT right move for student success, data shows

An assessment and remediation program pioneered by Fanshawe's School of Language and Liberal Studies (SLLS) is achieving results by helping students improve their literacy skills and stay in college.

An ongoing quantitative study of the Reason and Writing Curriculum program - better known as WRIT - by a team of researchers from SLLS and Strategy and Planning (formerly called Institutional Research & Planning) has resulted in increases in literacy scores and



retention rates among students who have successfully completed the program. Using an initial literacy assessment test and post-program test, and other College data, researchers found a 5.2% increase in retention for students who successfully completed WRIT (compared to the previous three-year average retention rate in the general communications courses that had preceded WRIT) and an overall improvement of 37% in literacy rates. Another study, based on the records of 1,200 first-year

Whitney Hoth

students enrolled in 2007, found that students who completed WRIT were significantly more likely to remain in college after one year (69% retention) than students who did not successfully complete WRIT (27% retention), and also significantly more likely to be enrolled after one year than the overall cohort who began in the fall 2007 (62.7% retention). In other words, students who successfully completed WRIT were 6.3% less likely to withdraw from college than the overall student population.

The WRIT curriculum delivers practical writing skills, focusing in particular on the basic postsecondary requirement of a persuasive essay. Students write a literacy assessment test prior to program start, and then take an exit test at the conclusion of the program to measure their progress. Championed by SLLS Chair Whitney Hoth, WRIT was initially implemented for first-year students in the school as a pilot in 2005. Two years later, the program was expanded to include business programs. Since then, WRIT has been implemented in almost all Fanshawe College programs.

"WRIT was created because there was broad evidence that the literacy levels of incoming students were inadequate for successful completion of postsecondary education and certainly inadequate to meet the needs of a changing economy," Hoth explained.

While not the only Ontario college to offer a remedial program, Fanshawe's WRIT is unique because of its "repetition and rapid response". Students write essays frequently throughout the program and have assignments returned rapidly for immediate feedback.

"We are teaching students to write by writing," he said, adding that WRIT also is one of the few programs in Ontario to quantify results using assessment and exit testing.

resource news



Fanshawe's information specialists (from left to right): Martie Grof-Iannelli, Manager of Library and Media Services; Vicky Mok, Systems/Technical Services Librarian; Martha Joyce, Media Services Librarian; and Suzanne O'Neill, Public Services Librarian.

Research resources

By Martie Grof-Iannelli, Vicky Mok, Martha Joyce and Suzanne O'Neil

If it's been a long time since you were a student and required library resources to complete assignments, you may not recognize today's libraries.

While still housing collections of books, films, magazines and scholarly journals, today's college library is more about providing access to information than about warehousing collections.

In this column we shall be highlighting resources and services that you can make use of as you start down the path to research.

As you know, the best way to keep up in your field is to read the current literature of your discipline. An easy way to get tables of contents for your favourite scholarly journals sent to your desk top is to set up a "journal alert" in whichever database covers those journals.

Our Library Research & Data Services staff would be happy to show you how this is done. As you narrow down the subject area of your research interests, most of the databases allow you to save searches & re-run them from time to time. This will help to keep you on top of the research being done by others.

For staff and students, news on research resources will be posted in the MyFanshawe portals.

Martie Grof-Iannelli (Manager of Library and Media Services) Vicky Mok (Systems/ Technical Services Librarian), Martha Joyce (Media Services Librarian), and Suzanne O'Neill (Public Services Librarian) are staff members in Library and Media Services They can be contacted by visiting the Research & Data Services desk in L003, by telephone at (519) 452-4275, ext. 4275, or by email at Infodesk@fanshawec.ca. If you have general questions about finding information for research and/or grant applications, email us at research@fanshawec.ca and your question may be addressed in a future column.



The Clinical Learning & Simulation Team (from left to right): Carol Butler, Gail Brown, SIM Man, and Dr. Harold Sobel

NURSING AND HEALTH SCIENCE STUDENTS ARE SUCCEEDING WITH A LITTLE HELP FROM THEIR FRIENDS

Students in Fanshawe's nursing, respiratory therapy and advanced care paramedic programs are getting some hands-on experience in patient assessment, management of complications and medical emergencies thanks to SIM Man and the team in Clinical Learning & Simulation. Using state-of-the-art practices, high tech monitors and life-like mannequins, coordinator Carol Butler (far left); clinical learning specialist Gail Brown and computer support specialist Dr. Harold Sobel help faculty create and conduct realistic scenarios for students with all the unpredictability and drama of a real life clinical encounter. The simulations, complete with Brown being the voice of the patient, are videotaped and a debriefing is held afterward to review students' performance. Fanshawe uses simulation technology to a far greater extent than many other colleges or even universities, says Butler, an instructional method students find empowering. A recent survey indicated that 96% of students believed the simulation experience would help them in their future careers, and that they value the opportunity to make necessary split second decisions, and make occasional mistakes in a safe environment.

"Fanshawe uses simulation technology to a far greater extent than many other colleges or even universities."

Carol Butler

presentations & publications



10. Wendi Roscoe 11. Murray Morgan

Presentations

Professor Mark Brenner, School of Human Services, recently presented a paper on Supporting Persons with Intellectual Disabilities in the Area of Sexuality at the 9th Annual Conference of the Australasian Society for the Study of Intellectual Disability in Melbourne, Australia. Brenner also participated in a panel discussion on the Professionalization of the DSW Workforce. The theme of this year's conference was More Than Just a Career: A Career That Makes a Difference.

Professor Carol Butler, School of Nursing, made two presentations at the Interprofessional Education Ontario 2009 conference – Creating Interprofessional Faculty Environments for Development of Interprofessional Simulation Templates and Integration of Interprofessional Simulation in Health Programs. The latter involved an acute care interprofessional simulation developed with faculty members Sandra Annett and Bobbi Thomas-Bailey and students. Butler also presented Walking in Your Students' Shoes: Simulation of the Month at the Global Best Practices in Simulation conference in Toronto. Simulation of the month is a unique method of providing faculty with PD in interprofessional simulation and is intended to increase use, comfort and familiarity with the technology. Butler also spoke at two panel presentations at the Simulation User Network conference in June.

Dr. Sandra DeLuca and School of Nursing colleagues Helen Harrison, Marilyn Ott, Pat Bethune-Davies and Dr. Thomas Gantert participated in the Engaging Reflection in Health Professional Education and Practice conference earlier this year. DeLuca presented a paper entitled *Finding affirming space for critical dialogue: Problematizing the critically reflexive classroom,* and she and her colleagues took part in a poster session on *Building college-based research and scholarship capacity through faculty reflection.* Mary Anne Krahn also presented a poster session entitled *That was then - this is now: reflections on the subjective experience of teaching nursing.*

Findings of a study entitled Fanshawe Pre-Health Student Math Performance by High School Course was presented at the Ontario Colleges Mathematics Association Annual Mathematics Conference by Professor Julian Jarosh, School of Health Sciences, on May 22. The presentation highlighted research by Jarosh, School Chair Susan Cluett and Professor Wendi Roscoe that indicated choice of high school math courses can impact student success in the Pre-Health Science program. Jarosh's presentation to more than 70 international college and secondary school educators and administrators reinforced previous research done by the Ontario College Math Project and with technology students by Professor Mark Henning.

Professor Murray Morgan, Lawrence Kinlin School of Business, presented a peer-reviewed paper on small and medium enterprises (SMEs) and international business students at the Beyond the Dawn of Innovation conference at Laurea University in Helsinki, Finland in June. Co-authored with Dr. Virginia McKendry, the paper also appeared in the conference proceedings. *Innovating to Win: Partnering Post-Secondary International Business Students with Small/Medium Enterprises to Spur Market-Driven Innovation and Global Competitiveness* featured collaborations between Fanshawe's international business management students and exporting SMEs, including Jones Packaging Inc. and London-based Lac-Mac.

Publications

An article by Professor Murray Morgan, Lawrence Kinlin School of Business, has been published in the Business Education Forum, an American publication. *Linking SMEs and International Business Students for Global Success* highlights the importance of SMEs to the revitalization of struggling economies. It refers to the partnership between Jones Packaging Inc. and Fanshawe's international business management students and proposes a new model for business/education collaboration.

Professor Mary Wilk, School of Nursing, has co-authored a textbook, companion workbook and instructor's manual for personal support workers. Mosby's Canadian textbook for the support worker (2nd ed.) is used throughout Canada in PSW and related support worker programs at community colleges, private career colleges and school boards. Wilk also recently published an article entitled *Tuberculosis in the frail elderly and the risk of transmission to health care workers* in Perspectives: Journal of the Gerontological Nursing Association.

project file

The project file features recently-funded and completed projects. Some are funded through Fanshawe College's internal seed funding programs – the Research Innovation Fund (RIF), the Curriculum Innovation Fund (CIF) and the Pilot Innovation Fund (PIF). Others are funded from external sources such as the Colleges Ontario Network for Industry Innovation (CONII). For more information about funding, contact ARIUP at research@fanshawec.ca.







1. Tracy Gedies 2. Anne Hill 3. Rob Haaf 4. Paul Jarvis 5. Dr. Danielle Renaud

Community College Faculty Members' Perception of Research and Scholarship Activity

Dr. Thomas Gantert, School of Nursing, received a Research Innovation Fund (RIF) grant to investigate nursing faculty perceptions of applied research and scholarship and investigate ways to build capacity in nursing research. Co-investigators: **Dr. Sandra DeLuca; Helen Harrison; Marilyn Ott; and Pat Bethune-Davies**.

Emergency Management Online Curriculum Development

Development of online modules for Fanshawe's Emergency Management graduate certificate program is the subject of a Curriculum Innovation Fund (CIF) project undertaken by **Dr. Tracy Gedies, School of Human Services**.

Reveal Competencies: Gaining Control of Your Environment/World

Professor Anne Hill, School of Human Services and co-investigator Rob Haaf, School of Contemporary Media, received a grant from the Colleges Ontario Network for Industry Innovation (CONII) to develop an interactive digital website to provide practical information on how to effectively use various types of assistive technology. Private sector partner Bridges Canada sells assistive technology products and provides support and training to educators and professionals working with persons with disabilities.

Putting Old Heads on Young Shoulders

Whether teaching students "emotional intelligence" results in higher retention rates is the focus of a RIF-funded project by Professor **Paul Jarvis, Lawrence Kinlin School of Business**. Jarvis will analyze the data collected in fall 2008 from two groups of business and IT students in the Strategy for Success course. One group received additional instruction in EI while a control group studied the regular curriculum. Data will be examined to measure any differences in retention from first to second semester, and whether EI played any role in achieving higher retention rates.

Muungano: Partners for Education in Africa

Dr. Danielle Renaud, Acting Chair, **School of Human Services**, received a Pilot Innovation Fund (PIF) grant for a project to help set up and train special educator teachers at a school for special needs children in Kenya. During the project, Renaud also developed placement and in-college study opportunities for students in Fanshawe's schools of Health Sciences, Nursing and Human Services.



rom where i sit

By Greg Weiler

We're on a roll!

Now that the results of the third College and Community Innovation Program competition have been announced (see newsflash, page 4), we can finally share the good news with everyone.

Fanshawe's Centre for Sustainable Energy & Environments (CSEE) has become a reality. The centre - or CSEE, as we've dubbed it -- will be the virtual umbrella for a series of College environmental projects aimed at optimization, adoption, integration and commercialization of renewable energy and recycling technologies. Eight multi-disciplinary projects involving the faculties of Technology and Arts, Media and Design are underway. Projects outlined in the \$2.3 million, five-year research program (2009-2014) focus on solar and wind power, renewable organic energy sources and technologies for food and plant production, and environmentally-friendly infrastructure. By 2014, it is expected that dozens of faculty and staff and hundreds of students will have been involved in CSEE projects.

So what does this all mean?

For companies, the availability of local innovation services from the College and its network of partners will assist small and medium-sized enterprises (SMEs) with their plans to improve existing products, expand markets and develop/commercialize new products and services. By strengthening their ability to compete in a global marketplace, these companies can begin to recover from what has been, for many, a brutal recession. As the word about our services gets out, discussions about new projects for the CSEE portfolio are already happening with other companies.

For the region – hard hit by a decline in traditional manufacturing and huge job losses – building a green sector will diversify the economy and create new opportunities for entrepreneurship and employment. Government and community consensus is that "green" is a field in which Southern Ontario can excel, with significant investments being made in solar power and wind in London, St. Thomas, Windsor-Essex and along the Lake Huron shoreline.

For Fanshawe, the benefits of securing a major grant are huge. First, in the past two years, the CCI program has

received well over a hundred applications. To date, only 22 projects at 21 colleges across Canada have been funded.

Getting this grant was not easy. The review process was rigorous. Proposals were reviewed by scientists and business leaders with expertise in the project field under the aegis of one of Canada's three major granting councils (NSERC).

The fact that Fanshawe has now been awarded this grant speaks to the quality of our ideas, to the dedication, hard work and vision of the research team members, and to the funder's recognition of our potential to make a significant contribution to the social and economic life of our country, our region and our communities.

Faculty and staff will benefit and grow from the active pursuit of new knowledge relevant to their disciplines.

The greatest beneficiaries, though, will be our students.

Colleges have long recognized the value of such handson experience to students through their promotion of co-op education and internship programs. Expansion of that concept to include innovation and applied research projects with business and industry represents a natural evolution in a 21st Century knowledge economy. The experiential learning students stand to gain from participation in projects that address real issues and solve real problems will enhance their employment opportunities. Integration of this new knowledge into curriculum will help give all of our graduates that competitive edge.

As we build our capacity to support innovation, Fanshawe is positioned to become an even stronger supplier of tomorrow's "highly qualified personnel", and a major catalyst for regional economic development.

Greg Weiler is the Dean of Applied Research, Innovation & University Partnerships at Fanshawe College.



next By Leslie McIntosh

"It's all good" attitude won't cut it if Ontario and Canada are to succeed

Stuff happens. While that's not *exactly* what we said in the 1970s, the phrase came to symbolize a convergence of multiple factors that ultimately led to an undesirable situation. Well, it's 2010, and stuff is about to happen. And a recent report by former Seneca College president Dr. Rick Miner that documents some of this "stuff" is alarming.

In a paper entitled **People Without Jobs, Jobs Without People: Ontario's Labour Market Fu Oture** (www.collegesontario.org/research/other/ people-without-jobs-jobs-without-people-final. pdf), Miner sketches out a scenario of millions of unskilled workers seeking jobs while employers languish with millions of unfilled positions.

A number of factors are converging to make this a real possibility, Miner asserts. Using population projections from the Ontario Ministry of Finance, he points to a 61% decline in the percentage of Ontarians in prime working years (aged 15-64) by 2030 and a subsequent decrease to 59% by 2050.

Concurrently, Miner argues, projected economic growth (even with Finance's medium growth scenario) coupled with a large, aging population will create 600,000 vacancies in the Ontario labour market by 2021, and more than one million by 2031.

Miner cites a 2007 report by Human Resources Skills Development Canada that forecasted 65% of all new jobs in Canada would require some postsecondary training and education by 2012 and increase to 80% by 2031. The Ontario government has acknowledged that 81% of the new jobs created between 1996 and 2001 required postsecondary education. Using 70% as a figure, Miner predicts there will be 450,000 people by 2016 who will not qualify for any skilled vacancies, 500,000 unqualified people by 2011 and more than two million unqualified by 2031. Demand for skilled workers, he asserts, will soon outstrip supply unless immediate action is taken.

Meanwhile, some talk about highly skilled jobs, high wages and a Knowledge Economy workforce

as if we were already there. But consider the following:

- Four out of 10 Canadians (40%) have literacy skills so poor they are "not fully competent for most jobs in our modern economy" and would be seriously restricted in their ability to undertake advanced skills training (Conference Board of Canada and ABC Canada).
- The number of 15-year-old Canadians with low-level math skills in Canada actually increased to 10.8% from 10.1% between 2003 and 2006 (Organisation of Economic Cooperation and Development).
- The number of "marginally literate" Canadians now accounts for 25% of the Canadian labour force (Conference Board of Canada analysis of the latest International Adult Literacy Survey data).
- Out of an estimated Canadian workforce of about 17.4 million people (aged 25-64), about 6.8 million (39.35%) either have only a secondary school diploma or did not graduate from high school at all. In Ontario, about 2.6 million people (38.56%) out of a workforce of 6.6 million, have, at best, a high school education. In the London Census Metropolitan Area, that figure is 38.9% (Statistics Canada, 2006 Census).
- About 7.2% of Ontarians currently work in minimum wage jobs, compared to 1.4% in Alberta, 3.1% in Saskatchewan, 5.8% in PEI, 5.9% in Quebec and 6.6% in Nova Scotia (Alberta Minimum Wage Profile, April 2008-March 2009).

When you really look at it, it's clear that we are not nearly as well-educated, skilled or employed in well-paying jobs as some would have us believe.

So what implications does this have for the Ontario college system? Based on medium population growth projections, we will need to train, retrain, or recruit some 1.73 million workers by 2031, says Miner. That translates into "an increase of 78,636 post-secondary graduates per year, an increase four times the number simply admitted into Second Career programs".

It can be reasonably assumed that society will increasingly look to colleges as it becomes evident that postsecondary education is critical to meeting economic, social and political goals.

So here are a few questions to ponder. If enrollments must increase to accommodate growing labour market needs:

- Where are we going to put these additional students?
- How will colleges pay for more teachers and staff to support more students?
- What risks and innovations are colleges are prepared to pursue to expand distance learning, since not every applicant can realistically be accommodated on campus?
- How do we address the issue of chronic system underfunding that puts Ontario colleges at the bottom of the national ladder in terms of dollars granted per student?

The issues present challenges for both governments and academic institutions.

In Miner's words, "Ontario and the rest of Canada... are about to encounter a set of demographic changes so profound that, if appropriate policy responses are not devised, and quickly, they have the potential to shake the very foundations of our society and our economy... what we have to accept is that the demographic changes that are coming cannot be wished away. They are real, and their implications are both imminent and frightening."

Leslie McIntosh is the editor of Research Fanshawe and Senior Project Developer in the Centre for Applied Research, Innovation & University Partnerships (ARIUP).

researchfanshawe

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