Spring 2009

ResearchFanshawe Magazine Issue 2

Joy Warkentin
Fan\shawe College of Applied Arts and Technology

Leslie McIntosh
Fan\shawe College of Applied Arts and Technology

Greg Weiler
Fan\shawe College of Applied Arts and Technology

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Recommended Citation

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research fanshawe

Putting knowledge to work

Taking Care of Business
Community Consultancy program pays off for businesses and students

www.fanshawec.ca/research
Q. You were the Senior Vice-President Academic Services when the decision was made to establish Fanshawe’s first-ever applied research office. What was the thinking behind this move?

A. As a nurse, I came from a practice environment. In fact, as a teacher, I founded a Research Club at another college. I got the chance to see first-hand the positive impact of research upon practice and education, and recognized that research adds value to learning. As senior Fanshawe administrators, we knew there were areas within the College that could engage in research and do it effectively, but we didn’t have the infrastructure to coordinate and drive it within the institution. That’s why we created the Centre for Applied Research, Innovation & University Partnerships (ARIUP) in 2005.

Q. How do students, employees, the College and the community benefit from Fanshawe participating in applied research?

A. Engaging in research has many benefits. As I’ve pointed out, qualitative and quantitative research enhances learning for our students. Working with companies and other external organizations helps our community and allows Fanshawe to play a greater role in regional economic development. Participation in these activities helps College employees improve their practice and keep their knowledge current. I think this will lead to better outcomes. We also need to research our own practice — our own business — because administrators need to be able to make decisions based on evidence, and the Board of Governors needs evidence upon which to evaluate the results.

Q. As an expert in curriculum, how do you see research being integrated into traditional classroom teaching?

A. There are all kinds of ways research can be integrated into college learning. Research is required to support applied degree programming. Students in many programs can work alongside faculty doing research as part of a government-funded or company-sponsored project. Integrating applied research into curriculum through project-based learning also is an effective method. Applied research can happen in virtually any academic area in a college. In fact, it’s hard to think of an area where you couldn’t do research.

Q. When it comes to applied research, what would you like to see as your legacy?

A. Ten years from now, I’d like to see research embedded in our academic programs. I’d like to see Fanshawe people have a greater opportunity to take part in research, especially international research. I’d like to see us continue to play a leadership role among Ontario colleges in applied research.

Q. Of all your achievements as Senior VP Academic, of which are you most proud?

A. I’m proud of many things, but the two highest on my list are improving academic excellence and facilitating greater student success. I hope I have helped put learning at the heart of the institution, so that when the College makes decisions, the first question it asks is: is this good for the students?

Joy Warkentin was trained as a registered nurse and holds a Master of Education in Curriculum. Beginning as a nursing instructor in Winnipeg and Thunder Bay, she became Curriculum Coordinator, Chair of Health Sciences, and then Associate Dean, Academic, at Confederation College prior to coming to Fanshawe. Warkentin served as Fanshawe’s Senior Vice-President Academic Services from 2000-2009 and recently retired. She was awarded an honorary degree from Fanshawe in 2008 for her contribution to applied education and to the College. She was the 2009 recipient of the fifth annual Minister’s Lifetime Achievement Award from the Minister of Training, Colleges and Universities. The YMCA of Western Ontario recently honored her with a 2009 Women of Excellence Award in the category of education, training and development. In May, the Fanshawe College Board of Governors named Warkentin the College’s first Vice-President Emeritus in recognition of her 40 years of service to Ontario college system and to Fanshawe.
Innovation activities at Ontario colleges got a vote of confidence with the province’s announcement of $10 million in renewed funding for the Colleges Ontario Network for Industry Innovation (CONII). The $10 million in new funding was contained in the March 26 provincial Budget 2009 announcement. The funding will enable more Ontario colleges to develop applied research and innovation capacity. It also will expand the number of colleges in the 10-member network and allow companies, especially small and medium-sized enterprises, to continue to take advantage of colleges’ expertise. CONII harnesses the expertise and resources of Ontario colleges to help companies solve problems, adapt new technologies for the marketplace and develop new or improved products and services. Services include needs assessment, technical solutions, prototype development, market research and feasibility, knowledge and technology transfer, funding for proof-of-concept projects and related services. “This is great news for Ontario colleges. It means the provincial government has recognized the valuable contribution colleges can make to business, industry and economic development through innovation and applied research activities,” said Greg Weiler, Fanshawe’s Dean of Applied Research, Innovation & University Partnerships.

For more information, contact the Fanshawe College Industry Innovation Centre, c/o ARIUP, at coni@fanshawec.ca.

London Hydro and Fanshawe partner on solar energy research

London Hydro and Fanshawe College are partnering on a new applied research project that may produce a greener, more efficient power grid. The three-year project focuses on harnessing and using solar energy and will involve up to 50 students in several programs. Students, faculty and Hydro engineers will utilize cutting-edge technology to test theories on how solar energy can be used to relieve pressure on the power grid during periods of peak demand. Dr. Mohan Mathur, Vice-Chair of London Hydro’s Board of Directors and Chair of the Mayor’s Sustainable Energy Board (MSEC) says: “This is an important research initiative for us, and we saw in Fanshawe the perfect partner to help us investigate some of the big questions we need to answer about solar energy. “We look forward to seeing the results that this project will produce.” The project is being led by principal investigator Dr. Ke Liu and co-investigator Dr. John Makaran, both of the School of Applied Science and Technology.

Federal government makes college innovation fund official

The federal government has officially announced $28 million in funding for its new College and Community Innovation Program (CCI). Speaking at the annual Association of Canadian Community Colleges (ACCC) College and Institute Applied Research Symposium, Member of Parliament Galipeau (Ottawa-Orléans) confirmed the funding and announced the results of the Round #1 CCI competition.

Galipeau, who made the announcement on behalf of Minister of State for Science and Technology Gary Goodyear – “one of your fans” – told the gathering of more than 100 college administrators, researchers and government officials that the initial 2007 CCI pilot project had yielded “impressive results” and demonstrated that Canadian colleges have the potential to help communities, business and industry build local and regional innovation capacity. Such federal investments in college and CEGEPS will, said the MP, “help create jobs, improve the quality of life for Canadians and strengthen the economy for future generations”. Eight projects, chosen from a field of 14 proposals, were funded in Round #1. The total funding allocation for the round was $18 million. Proposals from Rounds #2 and #3 currently are in adjudication, with additional two calls for Expressions of Interest due later this year.

Projects funded in Round #1 are:

• Clothing/Textiles Advancements: Sensor Development and Human Performance Enhancement, Camosun College, BC;
• Development of optimized laser and laser/GMAW hybrid welding platforms for upgrading products and processes in the manufacturing sector, Cégep de La Pocatière, QC;
• Applied research and support for SMEs in the Abitibi-Témiscamingue and Nord-du-Québec regions for the conversion of biomass waste, Cégep de Chicoutimi-Saguenay, QC;
• Development of future firefighter’s clothing and derivative uses for other workers, Cégep de Saint-Hyacinthe, QC;
• George Brown Research Labs, George Brown College, ON;
• Innovation support for bioresource businesses, the Institut de technologie agronomique, QC;
• Sustain Niagara: Supporting Innovation in Land Management, Niagara College, ON;
• Biodiesel production: Alternative Feedstocks and Commercial Adoption, Olds College, AB.

The CCI program is administered by the Natural Sciences and Engineering Research Council (NSERC) in collaboration with the Canadian Institutes for Health Research (CIHR) and the Social Sciences and Humanities Research Council of Canada (SSHRC).

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The White Rabbit put on his spectacles. “Where shall I begin, please your Majesty?” he asked. “Begin at the beginning,” the King said gravely, “and go on till you come to the end: then stop.”

From Alice’s Adventures in Wonderland by Lewis Carroll, 1865

“How do I begin?”

That’s the most frequent question heard at the Centre for Applied Research, Innovation and University Partnerships (ARIUP). With interest in innovation and applied research projects on the rise at Fanshawe, let’s explore some of the services ARIUP provides.

Every project starts with an idea, an observation or an assumption as an hypothesis. Innovation projects usually involve testing that hypothesis through some type of lab or experiment, demonstration, or a prototype. While considerable research has been done on some topics, other ideas may be new or build upon existing knowledge. ARIUP interprets funding program guidelines and works with innovators to develop a project or the work itself. ARIUP also conducts a small internal seed fund for innovation projects.

The illustration (right) that accompanies this story outlines the process. Because Fanshawe College acts as the trustee for grant funds on behalf of the researcher, the College is responsible for administering and accounting for how money is spent, and for ensuring submission of the contractually-required project and financial reports.

Once project development is underway, the next challenge is to identify potential sources of funding. There is a maze of hundreds of potential external funding programs – all with different criteria, deadlines and rules – through which to navigate. One of ARIUP’s roles is to help applicants zero in on appropriate sources so they don’t fall down the funding program rabbit hole. The department also administers a small internal seed fund for innovation projects.

Funding decision

YES

NO

Institutional Review Board (IRB) review if required

Discuss with ARIUP, enlist manager’s support

Enlist manager’s support

Submit proposal

Review proposal

Finalize application, secure approvals, submit to funder

Project Idea

Source potential funding/obtain RFP

Develop project, prepare proposal and budget

Write and/or edit the proposal and liaise with innovators to develop guidelines and works with innovators to develop

It’s not your mother’s library.

The cliché of the library being a repository for a collection of dusty old books – and even older librarians – is passé. Today’s libraries are information clearing houses, and librarians and library technicians have become information specialists.

The library carries traditional resources such as books, periodicals, gazettes, videos, films and audiotapes. But today, about 90% of Fanshawe’s information resources are online or in multimedia formats, says Martie Grof-Iannelli, Manager of the College’s Library and Media Services Department.

The library is increasingly diversifying its collection and adding online databases in order to cater to the needs of an Internet-savvy clientele, who want their information fast, in convenient formats and delivered straight to their desktops.

The library is a researcher’s best friend and a vital support service for any institution serious about engaging in research and innovation. Whether it’s for a literature search to gather data for that important proposal, or reading to keep up with the latest in your field, our Library and Media Services teams can provide advice, expertise and support to meet your information needs. For assistance, contact staff at the Library’s reference desk or call (519) 452-4430, ext. 4275.

In future issues of the research fanshawe magazine, library staff will offer information on tools and tips in a new column. Meanwhile, if you have specific questions you’d like to see addressed, please e-mail them to research@fanshawe.ca.
Community Consultants program pays off for businesses and students

Taking care of business is all in a day’s work for a select group of Fanshawe College students. Projects are accepted on the basis of their fit with curriculum. Payne says she looks for projects that can be completed within a four-month academic term. However, some projects have been divided into phases and companies continue to return to utilize the students’ skills. The student-business working relationship can vary from the heavy involvement of company personnel to projects where students carry out the assignment on their own without much interaction with company employees.

Students apply each year but only 12 are chosen. It’s a fabulous experience for the ones that are selected.”

“...and research and recommendations on how to identify...”

Fresh thinking aids innovation giant

When a legendary company needed research and recommendations on how to identify and address untapped market opportunities, that the company turned to Fanshawe’s community consultants. Corporate giant 3M Company — a firm synonymous with the word ‘innovation’ — approached the student consultants with a request to research potential new business opportunities in the high technology sector, says Elise Mahau, 3M’s Director of Government Affairs."Students work exceeded our expectations and not just from the standpoint of view, but in their professionalism," she says. Mahau championed the project inside the company and worked directly with the consultant team over a period of about six months. The consultants were presented with a broad question that challenged their skills in tackling a project. 3M (www.3m.com) is a large, diversified company that makes more than $50,000 products ranging from specialty film to tapes and adhesives to health care, security, electrical, industrial and office products like the well-known Post-It Notes. Mahau gives credit to the students, and especially to faculty advisors Rhonda Payne and Scott Hubert, for their skill in helping scope the project and finding a place to start. The consultants undertook a study of the high tech sector on a global basis and analyzed the marketplace, taking into consideration multiple variables such as the burst of the dot-com bubble, the downturn in manufacturing, employment trends and recent events in related market sectors. Their observation that more of the new high tech firms being established were small and medium-sized enterprises (SMEs) rather than large companies, led to one of their key recommendations. In a subsequent presentation to company senior executives and key vice-president, the consultants made two significant cases. The company, they said, could benefit by tracking venture capital to see which high tech clusters and companies were getting money, thus allowing 3M to pinpoint growth and emerging areas. The second recommendation was to establish close partnerships with, and provide support to, high tech SMEs that could bring new product ideas to 3M.

Mahau said the recommendation to track venture capital was a novel idea the company had not considered. 3M later adopted a similar approach as a global corporate business strategy. The company was happy to work with the students, not just because their input was useful, but because 3M takes an active role in its communities and likes “to give back.” It was satisfying to see the students learn and progress in self-confidence and presentation skills as they interacted with executives. By engaging in such projects, the company plays a role in helping train prospective, future employees, she says. Would 3M again become involved with the Community Consultants program? “To that, Mahau responds with an emphatic and resounding ‘yes’!”

Imagine trying to learn everything about an unfamiliar business, conduct market research and develop a viable market entry plan for a major Canadian medical supply company. That was the challenge given to Fanshawe’s community consultants by Trudell Medical Marketing Ltd. Trudell Medical Marketing Limited (www.tmml.com) is headquartered in London, Ontario, is a leading Canadian medical specialty sales and marketing company. TMML represents a selected number of exclusive manufacturers ranging from critical care medical supplies to operating room equipment/design services, the company focuses primarily on the needs of the health care sector.

The story of the partnership between Trudell and Fanshawe’s Lawrence Kinlin School of Business began almost two years ago when the company discussed with Fanshawe faculty the potential of the community consultants to help with market entry planning for a potential new infection control product, says Steve McCann, Trudell’s Director of Sales & Marketing. Since that time, the consultants have been engaged in — and just completed — a two-phase project consisting of primary and secondary market research and the development of a business plan for entering selected markets.

Initially, says Bryan Cawker, Market Business Manager, Critical Care, the consultants were asked to create and administer a Canada-wide survey to 10 potential market sectors, ranging from long-term care facilities to veterinary clinics and public and community centres. The first assignment was to gauge the level of sectoral awareness to the dangers presented by “superbugs” — strains of antibiotic-resistant bacteria and determine how knowledgeable respondents were about preventative measures. Based on data gathered, the consultants were then asked to recommend four sectors as the most promising targets for the new product. Throughout the process, the consultants worked closely with Cawker and McCann to learn about infection control, medical marketing and Trudell’s business needs.

The team of consultants presented their findings and rationale to senior company management in a forum set up to resemble a presentation to a corporate board. “We were very impressed with their professionalism and their hard work,” McCann says. “Looking at it in the context of a group of students going into something they didn’t know anything about, they definitely delivered more than I expected.”

The consultants went on to develop a business plan and market entry strategy aimed at the chosen markets, a project just completed in May.

While the company was happy to be involved in providing a real life, hands-on learning experience for marketing students and contributing to the training of future marketing professionals, McCann says the relationship was most certainly mutually beneficial. The project produced some valuable information for us and we would definitely work with Fanshawe again,” said McCann.
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.

Evaluating Strengths and Durability of Beams and Slabs
Solomon Asantey and co-investigator Amanah Kalloush, School of Applied Science & Technology, received a grant from CONII to study the concrete used in buildings, bridges and other infrastructure. Deterioration of infrastructure is a North America-wide problem attributed to road salt, climate and loading factors. The team believes that better concrete composition and improved construction techniques may play a role in strengthening and extending the life of concrete infrastructure. Civil engineering technology students also will be involved in this project.

Kids Have Stress, Too
After receiving an initial grant from CIF to modify a toolkit for early childhood educators, Jan Blaxall and Janet Foster, School of Human Services, are conducting a RIF-funded study to measure the effectiveness of the new materials. The original materials were developed by the Psychology Foundation of Canada, which also is a partner in the evaluation study. The Kids Have Stress, Too toolkit teaches ECE practitioners strategies to support children coping with stress. The program will be included in the ECE program curriculum.

Relationship Between Diagnostic Testing and Level of Success in Pre-Health Science Mathematics Courses
Susan Cluett and co-investigators Julian Jarosh and Wendi Roscoe, School of Health Sciences, collaborated to examine the relationship between high school mathematics grades, the School’s math diagnostic test, and the grade point averages of students in the Pre-Health Science Program. The aim was to determine effective ways of identifying at-risk students. The team’s study is posted on Research Fanshawe’s website.

Four-Day Campus Schedule
In the 2009 summer term, the School of Building Technology will pilot a four-day a week program delivery model. Faculty member Tom Davis (PI) and co-investigator Dan Douglas will use the occasion to measure the impact of a four-week on students, faculty, timetables, facilities use and the environment. Their work has been funded by RIF.

Development of a Measurement Tool to Determine Student Self-Efficacy Based on College of Nurses Entry to Practice Competencies
Cathy Dunlop and Jennifer Scarfe-Brideau, School of Nursing, are developing a measurement tool to determine the effectiveness of clinical learning approaches. The College of Nurses of Ontario’s Entry to Practice Competencies establishes requirements for the profession; the RIF-funded project will examine nursing student’s perceptions of whether their clinical learning activities help them achieve these competencies.

Interprofessional Field Practicum Project
Chair Michael Goodmurphy and a team of faculty from the School of Human Services have received a CIF grant to develop an interprofessional education component for students from the School’s nine programs. Although working in different disciplines, students from these programs often do their placements at the same organizations. The project is aimed at helping student develop stronger interprofessional practices and also is expected to help faculty develop practicum-related teaching strategies. Team members include: Julie Cross, Linda Carmichael, Karma McCloughan, Robert Owens, Jeff Sadler, Linda Skinble, Carol Tracy and Kay Wigle.

Exploring the Teaching-Learning Nexus at Fanshawe College
What do college students think about project-based learning? Ontario colleges are becoming more involved in applied research and those activities are increasingly involving students. In this RIF-funded project, Roger Fisher, School of Language and Liberal Studies, examines the inclusion of applied research in college programs and students’ perceptions of the value of such participation. Fisher also will survey faculty who are actively involving their students in innovation projects.

Assistive Technology to Support Professional Development for Teachers
Studies to date indicate that assistive technology is under-utilized and poorly integrated into individual education plans. Anne Hill, School of Human Services, will lead a project to study how assistive technology can be better utilized by teachers, educational assistants, families and students with disabilities to support learning. The project focuses on assessment of the impact of a comprehensive professional development program on student literacy and the comfort levels of educators, students and families.

Aboriginal Retention Rates
Mnatsabaing (To See a Good Vision): Building on Indigenous Students’ Successes at Fanshawe College outlines the findings of a study that examined indigenous college students’ perceptions, cultural and financial barriers, program choices and graduation rates. PI Stefanie Kelsey, School of Language and Liberal Studies, received a RIF grant to conduct the research. Participants were drawn from Fanshawe’s First Nations Centre. Her study is posted on Research Fanshawe’s website.

Increasing the Enrolment of Women in IT at Fanshawe College
While women make up more than 50% of the Canadian population, they only account for 23% of the information technology professionals in Canada. How to increase enrolment by women in IT programs - and how to stem the decline in the number of women enrolling in postsecondary IT programs - was the focus of an investigation by Karen MacIvor, School of Information Technology professor’s work examines the differing perceptions of male and female students toward the technology, and identifies skills that women can bring to the changing skills demands within the IT industry. Her study can be read in the on the Research Fanshawe website.
Presentations

Professors Tracy Gadies and Gary Sullivan, School of Health Sciences, and Sherry Jacklin, School of Human Services, presented at the January Interprofessional Education (IPE) Ontario 2009 in Toronto. Topic of their presentation was an event known as Trauma and Treatment. The annual exercise brings Fanshawe paramedic, emergency telecommunication, television, nursing and police foundation students together to work in a controlled educational setting modeled after real-life emergency situations. Trauma and Treatment was supervised by faculty and by professionals from Middlesex London EMS, Elgin-St. Thomas EMS and the London Police Service. More than 250 people took part in the event.

At the same conference, Professors Liz Lorussu, School of Health Sciences, and Shelley Masse and Judy McGwire-Waring, School of Nursing, talked about the developments of an interprofessional case study showcasing the role of various disciplines involved in the care of a client with dysphagia. The case study was originally developed by a team of interprofessional educators for presentation to second-year Medical Radiation Technology students. Future plans for the case study now on CD include adaptation for other health profession groups and learning environments. Funding for this project was provided by the University of Western Ontario’s Office of Interprofessional Health Education and Research.

Prof. Murray Morgan, Lawrence Kinlin School of Business, presented at the Advanced International Business Institute for Community College Faculty (AIIBI) Conference at Michigan State University in June 2008. The topic of his presentation was best practices resulting from a collaborative research project undertaken by Fanshawe College business students and Jones Packaging Inc. The AIIBI conference focuses on college faculty with experience in international business, and is limited to 25 participants who compete for an invitation. Prof. Morgan was one of only twoCanadians chosen to attend, and he was one of five presentations made at the event.

Professors Otto Rosenkranz and Dana Morningstar, School of Language and Liberal Studies, presented an hour-long session at the 10th Anniversary Year McGray-Hill Ryerson Many Dimensions of Student Engagement Conference at Wilfrid Laurier University. The more than 220 conference attendees were college and university administrators, faculty, and staff representing regions from British Columbia to the Atlantic provinces. Participants learned about the many experimental and community-based projects embedded in the curriculum of Fanshawe College’s post-graduate Corporate Communication and Public Relations program. Students work on case studies and communication projects for businesses, arts, not-for-profit, foundations, medical and post-secondary institutions and organizations. The session’s presenters also heard from current student Adrianna Barbary, and Devin Robinson, a graduate, about what they have learned through their experiences with project-based learning. Experiential projects can lead students to increased confidence, improved goal motivation, and employment readiness.

Publications

Prof. Jan Blaxall, School of Human Services, has published two recent articles in Interaction, a journal produced by the Canadian Child Care Federation. Prof. Blaxall’s articles, Early Childhood Practitioners and Parents: Partnering to Enhance Children’s Self-Esteem and Time-Out or Time-In, appeared in the fall 2008 issue. Both articles are posted on the Research Fanshawe (RF) website at www.fanshawe.ca/EN/Research/research/13038.html

An article by Prof. Tina Bonnett, School of Human Services, also has appeared in Interaction magazine. The article summarizes the results of her Master's thesis research on the infant-educator relationship in a childcare environment. Primary Caregiving: A Foundation for Relationship-Based, Family-Centered Practice appeared in the spring 2008 issue. Prof. Bonnett has presented her work to ECE professionals at various childcare centres in the London-St. Thomas region.

Dr. Sandra DeLuca, Chair, School of Nursing, published an extensive list of papers in refereed conference proceedings in 2008. Produced in collaboration with other researchers, Dr. DeLuca co-authored: Build it and they will navigate: An online interprofessional learning program preparing preceptors and students for clinical/practice education. National Health Sciences Students’ Associations (NHSSA) Annual Interprofessional Healthcare Conference. London, ON. (January); Preceptor Education Program (PEP): An on-line program to enhance the clinical preparation of health professional students and support preceptors. University of Windsor, Nursing Research Conference: Celebrating Nursing Excellence. (March 29); Redesigning Preceptor and Student Education: An online interprofessional learning program preparing preceptors and students for clinical/community placements (PEP). Community Health Nurses Association of Canada (CHNCA). Toronto, Ontario. (May 29-31); Navigating an on-line frontier in preceptor education. Canadian Association of Occupational Therapists. Yukon, NWT. (June); Educational needs assessment for health professional preceptors. Canadian Association of Occupational Therapists. Yukon, NWT. (June); A New On-Line Clinical Education Program for Physiotherapists - The Preceptor Education Program (PEP) for Health Professionals and Students. Canadian Physiotherapy Congress. Ottawa, Canada. (June); Creating a Vision: Building a Caring Community of Nursing Scholars. 30th International Association for Human Caring Conference. University of North Carolina School of Nursing. N.C. Optimizing Clinical Placements: An On-Line Program for Students and Supervisors. Canadian Association of Speech Language Pathologists and Audiologists Annual Conference. Alberta. Dr. DeLuca also authored two chapters in the book From the Other Side of the Fence: Stories from Health Care Professionals (Jeff Nisker, editor. Nova Scotia: Porterfield Press). The book is a collection of 31 stories, poems and essays and plays about the experiences of health care professionals in Canadian hospitals. The book is available online from amazon.ca and chapters.indigo.ca.

Support staff Sandra Hennessey, Centre for Community Services, and Leslie Mcintosh, Centre for Applied Research, Innovation & University Partnerships and Bruce Moore, Learning Systems Services, have posted their project leadership, editing and graphic design skills to help produce Bare

Essentials: An Introduction to Essential Skills. Produced by the College Sector Committee for Adult Upgrading (CSC), Bare Essentials is targeted at teachers and literacy practitioners and offers a basic overview of the nine essential skills, their application and importance to learners. Ms. Hennessey is currently on leave from Fanshawe College to work with the CSC. The publication is available at www.fanshawe.ca/EN/Research/research/13038.html


Shirley Porter, Counselling & Student Life Services, has published the results of her latest research in College Quarterly. Increasing Paramedic Students’ Resilience to Stress: Assessing Correlates and the Impact of Intervention, appeared in the 2008 summer issue. Co-author is Andrew Johnson, a UWO graduate student who assisted with the project. The article can be read online at www.semenac.ca/quarterly/2008-summernumber/summernumber-03-summer/porter-johnson.html. The original research report is on the Research Fanshawe website at www.fanshawe.ca/assets/research/IncreasingParamedicStudentsResilienceToStress-PorterMay08.pdf.

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3. Judy McGwire-Waring
4. Murray Morgan
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21. Otto Rosenkranz
Colleges and the Innovation Agenda

You’ve heard it over and over. How does Canada maintain its competitive position in the global economy? Wealth is shifting. Terms like “global competition”, “economic downturn”, “green economy” and “knowledge-based enterprise” fill the daily news media. One common theme in all of these reports is innovation. Our federal and provincial governments all have innovation agendas. There should be no argument that Canada needs to continue to invest in basic and applied research at its universities, hospitals, and research institutes. That work leads to the innovations of the future. Colleges on the other hand have a much more salient role in dealing with the innovations of the present. I call that “putting knowledge to work.” We sometimes get lost in terminology. Colleges do applied research, but so do universities. In my view, we are finally starting to see resources being allocated to help mobilize that potential. We’re already in the business of helping students learn to use state-of-the-art tools and techniques. We have faculty and staff with robust, real world experience. We have top notch facilities. When we muster our assets to take aim at the real opportunities and problems facing employers, we can help them shoot and score in the innovation game.

By engaging with external organizations, we also provide a rich experience for students and help our faculty and staff stay abreast of what is happening in the world for which we are preparing our graduates. That isn’t evolution – rather this isn’t new to colleges – but revolution – because this isn’t about our students and professors finding something new in the world, it is about us finding a new way to apply what we already know. The role that Canadian colleges can play in fostering innovation has been misconstrued, and we are finally starting to see resources being allocated to help mobilize that potential. Canadian colleges are emerging as a valuable resource in helping to advance our national innovation agenda. Both levels of government have committed specific resources to help colleges increase their capacity to exploit that potential. The federal government has committed $48 million in Budget 2008 for the College Community Innovation Program to help colleges increase their capacity to support regional industry sectors. Ontario committed $10 million in 2009 budget to sustain and expand the Colleges Ontario Network for Industry Innovation (CONII), of which Fanshawe is a founding member. So how can we help employers in our region innovate and be successful? Take a look at this issue of researchfanhawe magazine for some examples of how we are working with business and industry. It’s clear – we’ve got game! (By Greg Weiler)

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

Innovation found in unexpected (but common sense) places.

Developing an innovation culture in Ontario colleges comes with several challenges – and preconceptions about what constitutes “research” is a big one. In thinking about this, I hear back to something former Science Vice-President Academic Joy Winkens said in her interview early in this issue: “Applied research can happen in virtually any academic area in a college. In fact, it’s hard to think of an area where you couldn’t do research.” She’s right. Once we stop thinking about research and innovation as merely being something done by people with microscopes and white lab coats – and start thinking of it as putting knowledge to work – it opens up a world of possibilities.

Research opportunities are obvious when it comes to fields such as health sciences, nursing or high technology. Social sciences and humanities also are areas where academic-based research is common. Opportunities to conduct applied research and innovation in other college common programs – like hospitality, transportation services and media – are less obvious. But this kind of innovation is happening at Canadian colleges, nevertheless.

Let’s take a look at some examples of some current/recent college-based applied research projects in these disciplines.

• Holland College (Prince Edward Island) is conducting food product development research in its new Canada SmartKitchen research centre. The state-of-the-art facility supports the agri-science and food processing industries in the region.
• Niagara College (Niagara-on-the-Lake) has conducted applied research in culinary and food safety, including an investigation into the factors that influence handlers’ and servers’ attitudes to food waste, and on studies of consumer taste preferences.
• Optimizing processes for the manufacture of organic dog biscuits, and new product and recipe development for grocery game show Compliments brand, are just two of the hospitality-related projects undertaken at George Brown College (Toronto).
• Funded by the Ontario Ministry of Research and Innovation and a private sector partner, the Connooga College (Kitchener) project involves the design optimization and fabrication of a hydrocarbon market oil cooling and filtration system for use in the motorcycle market. The prototypes have been delivered to the partner and are expected to be used in field testing for product verification.
• Sheridan Visualization Design Institute (VDI), part of Sheridan College in Oakville, and its partners have created a game deploying 3D technology for the iPhone. The project has allowed partner Spurrier Visual – a pioneer in auto-meroscopic or “glasses-free” 3D – to improve the software development kit (SDK) technologies it offers to 3D game developers and game-content creators. A second partner, the Family Channel (Family.ca) had in development team provide guidance on the look and feel of the game based on a Carnival theme—hence, the name of the game: “Carnival Craze.” The network will shortly launch a series of mini games under the Carnival banner:
• Okko College (Albemar) developed inexpensive digital imagery for monitoring land-based projects. In School of Innovation assembled airborne equipment that could be rapidly deployed from the back of an SUV. Recent advancements in electric powered, radio controlled aircraft, and digital cameras have made it possible to collect cost effective aerial data, and existing technologies from a variety of industries were combined and evaluated.
• The Ontario College of Art & Design (Toronto) is developing projects in digital media, design optimization and fabrication of an after-market modifications system as part of a technical design project.

Ontario colleges are ready for a trip down that road. (By Leslie McIntosh)

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

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