

Higher Education in Transformation 2016

November 2 to 4, 2016
Oshawa, Ontario
Canada

Faculty of Education
University of Ontario Institute of Technology
11 Simcoe Street North

Sponsoring Institutions Canada - Ireland

Dublin Institute of Technology (DIT)
Durham College (DC)
Institute of Technology, Blanchardstown Dublin (ITB)
Institute of Technology, Tallaght Dublin (ITTD)
Technological University for Dublin Alliance (TU4D)
Trent University
University of Ontario Institute of Technology (UOIT)

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Wednesday, November 2

8:30 a.m. - Registration

Ground Floor

9:45 to 11:45 a.m. - Welcome and Keynote

1.0 - Change in Canadian higher education (room 210-213)

Chair: Brian Campbell (UOIT)

- Donald Fisher, Professor Emeritus, University of British Columbia, Policy and Change in Canadian Higher Education Systems

The focus is on the relation between PSE policy and its implementation across three provinces, British Columbia, Ontario, and Quebec, from the early 1980s through to 2010. My policy sociology orientation inevitably directs my gaze to the structural context and the play of social forces in both the creation of the policy environment and the restructuring of the state formation. State PSE policy is used as a point of entry in order to locate these policies within the key structural trends -- namely, globalization, marketization, and academic capitalism.

I contend that over the last three decades the adoption of neoliberal ideology has been a major cause of some dramatic changes in PSE policies. Five dominant policy themes are identified: (1) accessibility, (2) accountability, (3) marketization, (4) labour force development, and (5) research and development

PSE policy at the federal and provincial levels has been driven by a changing political-economic imperative. Political ideology is at times a critical factor and at other times is overwhelmed by larger structural forces such as globalization and marketization. PSE has become more central to the legitimation and accumulation functions served by the state, so PSE policy has become more closely tied to economic and social development. If R&D and labour force development primarily serve the accumulation function of the state, then accessibility and accountability serve its legitimation function both directly and indirectly by guaranteeing individual economic security (Spitzer 1987; Sears 2003).

The focus will be upon how all three provincial governments have consistently been concerned with accessibility. Provincial governments recognize their responsibility for the provision of access so that individuals can obtain postsecondary credentials and thereby attain some degree of economic security. Yet here, too, the force of globalization is clear as these governments utilize the general faith in markets to justify the increase in tuition fees. The anomaly here is Québec, where successive administrations have either chosen or been pressed to maintain low tuition fees. In these ways, provincial administrations use PSE policies on accessibility to legitimate their governments while at the same time appearing to be accountable for individual economic security.

Specifically, I will examine two structural relations: accessibility/legitimation and accessibility/accumulation. In the first relational set, administrations across the political spectrum in all three provinces have consistently used PSE policies on accessibility to legitimate their governments. This has occurred in a number of ways, such as the increases in funding to move the participation rates into the “universal” category; the extension of degree-granting

status to more institutions, thereby changing the structure of the PSE systems in both Ontario and British Columbia; and changes in tuition fee regulation associated with the election of neoliberal regimes. In the second relational set, accessibility fulfills an accumulation function at the individual level as the opportunity to obtain credentials both academic and vocational is extended to a larger share of the population. I argue that PSE state policy on accessibility at the provincial level has primarily been aimed at achieving greater economic security for individuals. The connection between educational opportunity, the accumulation of what Bourdieu would call “cultural capital” and getting a job has become part of our taken-for-granted assumptions about modern society. In this way, I argue, that all three provincial governments have made PSE more central to the way they fulfill the legitimation and accumulation functions at the state level.

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- Dan Lang, Professor Emeritus, University of Toronto, New Approaches to Bureaucracy, Homogeneity and Isomorphism in Quality Assurance

How can the quality be assured? Does the pursuit of “ideal” standards promote the assurance of quality or is “world class” a curse of comparison? This discussion will centre around issues that recur as universities and governments address these questions. For example, jurisdiction, levels of aggregation, scope, the “student experience” versus “academic experience,” and “pooling.”

11:45 a.m. to 12:30 p.m. - Lunch

Lower Level

12:30 to 2 p.m. - Sessions

2.1 - Workshop - Universal design, transformation through innovation and creativity (room 313)

Chair: Diana Petrarca (UOIT)

- Margaret Kinsella (ITB), Larry McNutt (ITB)

2.2 Student success between college and university (room 211)

Chair: Tim McTiernan (UOIT)

- Maurice DiGiuseppe, Fabiola Longo, Jennifer Percival, and Bill Goodman (UOIT) and Arlene De La Rocha (Durham), Examining Academic Performance among Pathway and Non-Pathway Health Sciences and Nursing Students

Pathway programs providing opportunities for college students and university students to more efficiently earn university degrees and college diplomas, respectively, are becoming more common in Canada and internationally. In Ontario, Canada, the University of Ontario Institute

of Technology (UOIT) and Durham College (DC) have collaborated in the provision of pathway programs for over a decade. These programs, offered in a number of fields, including science, health sciences (including allied health sciences, kinesiology, and nursing), social science and humanities (including legal studies, criminology, and commerce), nuclear power, and education (including adult education and early childhood studies), facilitate the transition from college to university (or vice versa), and enable college diploma program graduates to obtain equivalent credit for completed coursework, and earn a 4-year (honours) university degree in as little as two years. This paper provides a quantitative, comparative analysis of the academic performance (via GPA scores) of pathway students (college-to-university transfer students) and their non-pathway, traditional counterparts (students who entered university directly from secondary school) enrolled in a variety of courses within UOIT's Bachelor of Health Sciences (BHS) and Bachelor of Allied Health Sciences (BAHS) programs, and the collaborative UOIT-DC Bachelor of Science in Nursing (BScN) programs. Results indicate that, in general, pathway students in these health sciences and nursing programs consistently outperformed their traditional classmates in overall academic achievement; such results supporting the conclusion that college diploma programs in these areas tend to provide adequate preparation for successful pathway program completion.

- **Scott Clerk (UOIT), Opening International Pathways: an analysis of the internationalization rationales for developing '2+2'-style articulation agreements with global institutions**

The University of Ontario Institute of Technology (UOIT) has a legislated mandate to create college-to-university transfer pathways, and a strategic plan which sets out expectations to internationalize the university. While UOIT has a well-developed set of pathways from Ontario colleges, UOIT has only recently joined other Ontario universities in creating '2+2'-style pathway or articulation agreements with international institutions. The models for these agreements are numerous (2+2, 3+1+1, etc.), with any number of possible permutations. The rationales for these arrangements are also numerous, and vary based on type and direction of the arrangement, the context of the home institution and home country, and the priorities of the receiving Ontario university, amongst other factors.

This paper plans to explore those rationales and analyze them within the context of the broader internationalization of higher education, with a particular focus on the possibility of college-to-university, or "vertical" (Lang, 2008) transfer pathways across borders. Within Ontario, the expected outcomes for college-to-university pathways include increased flexibility and improved access (Kerr, McCloy, Liu, 2010), and there is a growing body of work on the impact of these pathways (Menard, Liu, Zhang, & Kielar, 2012; Martinello & Stewart, 2015). However, there is little research available on international pathways, and the "student-centric" approach to domestic pathway design is not apparent as the rationale for these international pathways; rather, the interests of receiving institutions and sending countries seem to prevail. What's more, international mobility of students to study at Ontario universities mirrors the socioeconomic inequalities amongst and within countries – in contrast with the implied intent of college-university pathways to broaden access and diminish socio-economic inequalities. This paper will situate the development of international college-to-university transfer pathways within both the literature on international education and the literature on post-secondary transferability, identify key unresolved issues for understanding these specific types of international pathways, and further explore the possible benefits of this "niche" pathway approach for UOIT's burgeoning internationalization efforts.

- Jennifer Percival, Glenn Harvel, Joe Stokes, Alena Shah (UOIT), and Jeff Zakoor (Durham), Development of a University/College pathway for academic success remediation

Some students have difficulty in achieving success in the first year of study. Programs are intensive and do not include capabilities to recover from deficiencies affecting academic performance. A mechanism is needed for students to break off from their program, address their specific deficiencies, before returning. The University of Ontario Institute of Technology (UOIT) and Durham College have developed a pathway for enhanced academic success to support students requiring remediation. The proposed pathway is done in such a way that successful students will be eligible to earn a General Arts and Science certificate concurrently with the continuation of their University degree.

In the academic success pathway, students that have been suspended from UOIT will be given the opportunity to enter a Durham College program that will address academic success related deficiencies. The students will undergo an assessment process to identify their specific needs and will have access to academic advisors at both institutions for guidance. Upon successfully completing the program, the student returns to University with a position reserved in their program of study allowing for a semester reduction in the time lost due to suspension.

This program allows for the student to focus on other academic deficiencies upon their return to UOIT. The program also allows for the student to recognize that they are not in the right program or at the right academic level and thus may choose to transfer to the College or apply to switch University programs during the remedial semester. Regardless of the pathway taken, the student is provided the opportunity to be successful in obtaining the academic education that they are suited for.

2.3 Partners and publics I (room 212)

Chair: Bill Hunter (UOIT)

- Claire McAvinia, Claire McDonnell, and Roisin Donnelly (DIT), Technology Infusion within Part Time Professional Development Programmes for Academic Staff and Industry Practitioners

This paper reports on the experiences of programme co-ordinators and includes findings from a two year (2013-15) evaluation pilot study on a key communication technology – audio feedback – conducted across three accredited part-time programmes for a blend of academic staff (faculty) in higher education and eLearning industry practitioners. Key to our decision making with regards to which tools to infuse in our programmes is our aim to help the educators who participate on our programmes to make better use of technology tools in their own instructional contexts. This paper focuses on the example of formative audio feedback. Anticipated benefits were that the audio mode would provide clearer feedback, and that tone of voice would help convey meaning, adding a personal element to engage learners more effectively. Participant responses to end-of-module survey questions on their experience of audio feedback and their thoughts on implementing audio feedback in their own practice are presented and discussed. The perspectives of the tutors involved are considered, and we share practical details of how audio feedback can be constructed and distributed to students. The initial study has demonstrated the potential of formative audio feedback to engage learners more effectively in developing and improving on their work.

- Brenda Gamble (UOIT), Randy Wax (Lakeridge Health) and Derek Manis (UOIT), Establishing community, academic, and industry partnerships to support experiential learning within a community-based resuscitation research collaborative

Sudden cardiac arrest (SCA) is a common but potentially reversible cause of death. Unfortunately, few communities have attempted to improve survival using a holistic approach to resuscitation science including preventative, clinical, and rehabilitative care. The Durham Region Resuscitation Research Collaborative (DRRRC) has been established to identify research priorities, leverage regional community and health care services, and provide experiential learning and training opportunities within the resuscitation science continuum of care. Our objective is to provide an overview of the DRRRC and to present the collaborative learning experiences that link learners, stakeholders, research, and knowledge users in a community based resuscitation laboratory. We used a case study approach that illustrated the opportunities for learning within the context of DRRRC's first initiative focused on improving community based cardiopulmonary resuscitation (CPR). To date, this community-based resuscitation laboratory has included: one-second year and four fourth year undergraduates, and one medical resident. Learners engaging with the co-investigators and stakeholders have experienced learning opportunities that support the development of critical thinking skills and problem solving in the real world to support strategies to increase bystander CPR.

- Shaun Ferns, Mark Keyes, Jonathon Cussen, Robert Hickey, Richie Ryan and Douglas Hynes (ITB), QualiBuild Train the Trainer: Lessons learned from the development of a program for training trainers of construction workers in Ireland

In response to recent directives to promote quality energy efficient buildings throughout Europe, the EU funded Build UP Skills Ireland (BUSI) project launched a national skills gap analysis of the construction sector in 2011. Generally, the gap that was identified was one of knowledge rather than skills. However, this knowledge is fundamental for the successful implementation of low energy buildings. The BUSI analysis also found that the majority of trainers of construction related crafts lacked the experience and knowledge on the implementation of energy efficient buildings. Consequently, the follow on Build UP Skills QualiBuild project focussed on the development and delivery of a Train the Trainer programme which would address this. The QualiBuild Train the Trainer pilot was designed with a focus on active learning, incorporating a flipped learning model for the delivery of a blended learning programme. This was facilitated by the development of learner manuals for each of the programme modules which presented the course content to the learners ahead of face-to-face workshop events. Group learning activities were then employed as a means for achieving one of the key learning outcomes identified in the programme development, a need for attitudinal change. This paper will offer a rationale for the design, structure and delivery methods adopted for the programme. It will also present and discuss the successes and failures of the pilot along with recommendations for future offerings of similar type programmes.

2.4 Change and faculty work worlds (room 213)

Chair: Shirley Van Nuland (UOIT)

- Pat O'Connor (ITB), Negotiating Professional Identity in a Volatile Higher Education Environment

This research study outlines the impact of a changing and volatile higher education environment on how lecturers negotiate their professional identity. Using narrative enquiry to access the

stories and narratives of lecturers working in a number of the institutes located in the Dublin region, the paper identifies six constructs, Discipline; Professional Practice; Teaching; Development; Community Development; and Research which underpin the professional identities of lecturers. Using a framework for the analysis of professional identity in education, portraits of individual professional identity emerge, giving insights into the dialogic process of the negotiation of professional identity.

Institutes of Technology (IoT) are a major sector of a binary system of higher education in Ireland. Following convergence in the sector, and recent policy measures and changes signalling a 'future higher education landscape' opening the possibility of technological university status institutes the traditional orientation to practical, vocationally focussed teaching in Institutes of Technology is now challenged.

The study proposes that a multiplicity of factors are combined in particular ways reflecting both structure and agency in individual lecturer's negotiation of professional identities, and argues that provision for this diversity be made in the design and implementation of development structures at the level of the individual and the organisation - one that recognises that a Higher Education professional development model based on a "one size fits all" approach will not work.

- **Linda Muzzin (Toronto) and Diane Meaghan (Seneca), Addressing Inequities in the College of the 21st Century**

Based on a SSHRC-funded study of college faculty and administrators in BC (which was part of a national study), we documented a set of inequities that can be related to class and gender stratification within our society. For example, early childhood education (ECE), practical nursing and literacy faculty and administrators reported a history of restructuring which compressed or slashed their vocational programs in the colleges in the 1990s. They also explained how this restructuring disadvantaged poorer women students, as well as placing heavy workloads on faculty and students. These feminized vocational fields are more vulnerable to instability in the "new" college in which the "flexible" worker is the norm in the twenty-first century—in fact, we determined that they are more vulnerable than the academic fields such as arts and science and business. We asked ourselves why, even though BC has arguably the most progressive equity legislation in their collective agreements with faculty, these feminized areas still tended to be most vulnerable in BC colleges.

Our paper explores this question through documenting how government restructuring produced inequities which persist to this day in four BC colleges, one of which was a university college and two of which were in the interior of the Province. We argue that the inequities reported in feminized fields are related to class, gender and other difference along with government intervention in college curricula. Fields traditionally considered academic are more protected given the funding system in BC, but there can also be inequities in any division, as we discovered. The university college example particularly illustrates how these processes work.

At the level of the college, we document how some strategies magnified these disparities after restructuring, while others attempted to address the problem. For example, faculty in literacy, nursing and ECE all took upon themselves the responsibility for delivering their programs when they were restructured by various strategies; unions tried to protect vulnerable workers through new clauses in the collective agreement; and one college repositioned itself as an elite college, including its ECE program. We will cite theories of interviewees about the basis of the inequities; some clearly identified the consequences of the offending strategies as a devaluation of women, children and the poor. Our paper documents their arguments and begins to search for ways in which these structural realities might be addressed by various stakeholders, such as

government, union leaders and federations, leaders of professionalization projects in these disciplines, faculty in these fields and beyond, college administration and community groups.

- Eoin Dunne (DIT), An examination of how the entrepreneurial university should overcome barriers to recruiting and retaining researchers

The purpose of this paper is to identify the barriers to recruiting and retaining research talent in higher education today, and to consider how to overcome these barriers. The need for a pipeline of research staff is being driven by a requirement for higher education institutes to commercialise their knowledge and research findings in support of socio-economic objectives, and to compensate for the ongoing reduction in state funding. Using the concept of the entrepreneurial university as a lens, this paper describes how higher education must adopt to significant forces for change, which left unchecked will outrun their ability to respond. To further understand the issues surrounding researcher recruitment and retention, interviews were conducted with principal investigators in DIT which indicated correlation with the literature on issues such as pay and conditions, and the attractiveness of the competing universities. This was followed by further interviews with HR managers in the TU4Dublin Alliance to consider how such barriers could be reduced. This paper notes the necessity to develop a 21st century workplace that will nurture, support, and harness research talent in order to fulfil strategic objectives, and concludes with a number of recommendations which have emerged from the research.

2 to 2:30 p.m. - Break

2:30 to 4 p.m. - Sessions

3.1 Workshop - Good practices for designing blended TA and faculty development initiatives (room 313)

Chair: Claire MacAvinia (DIT)

- Jaymie Koroluk, Bridgette Atkins and Matthew Stranach (UOIT)

Workshop type: Skills development workshop

During the 2014/2015 and 2015/2016 academic years, the Teaching and Learning Centre (TLC) at the University of Ontario Institute of Technology (UOIT) offered two new Certificate in University Teaching (CUT) programs for faculty, sessional instructors, staff and teaching assistants (TA's). In the 2014/2015 academic year, one program was offered to faculty, staff and teaching assistants. Based on feedback from participants, and in order to provide programming tailored to specific teaching contexts, the decision was made to offer two separate programs in the 2015/2016 academic year – one for faculty and staff and another for teaching assistants and other graduate students.

“Blended” Approach

These programs were designed and delivered using both online and face-to-face modalities, with a significant emphasis on online technologies; i.e. following a “blended” approach (Garrison & Vaughan, 2008). Blended learning has been defined as “the thoughtful fusion of face-to-face and online learning experiences” (Garrison & Vaughan, 2008, p.5). Garrison and Vaughan (2008) further note “the basic principle is that face-to-face oral communication and online written communication are optimally integrated such that the strengths of each are

blended into a unique learning experience congruent with the context and intended educational purpose” (p.5).

“Blending” the CUT

University teaching certificate programs offer the opportunity for sustained, in-depth teaching development. Technology enriched blended formats offer new venues for these programs, allowing for flexible delivery and the opportunity for participants to experience both face-to-face and online activities. For the most part, CUT participants would review content and participate in activities online in a course site within the university’s learning management system before meeting in-person to discuss the module content and share ideas relevant to their respective teaching contexts.

A Participatory Workshop

In this half-day workshop, representatives of UOIT’s TLC will provide a brief background of their shared experiences designing and facilitating faculty and TA development programs in blended formats. Presenters will also discuss how the formation of Communities of Practice (Wenger, McDermott, & Snyder, 2002) can be a positive outcome of such initiatives.

Wenger, McDermott, and Snyder (2002) define communities of practice as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p.9).

Lessons learned through this process and plans to improve this programming will also be shared.

Learning Outcomes

During this workshop, participants will:

- Share examples of faculty and/or TA development initiatives at their respective institutions.
- Discuss common challenges that arise in planning and facilitating these initiatives (i.e. audience-appropriate content and pedagogies, format, technology use, scheduling, workload and assessment).
- Develop ideas for educational development initiatives at their own institutions.
- Collaborate on a set of recommended good practices for developing teaching development initiatives which include both online and face-to-face components.

Principles and practices used in these activities will include:

- Constructive alignment
- Universal Design for Learning
- Constructivist and/or connectivist learning theories

Participants are encouraged to bring materials related to existing programs or those under development.

This workshop will require a space with flexible seating and tables (to facilitate group work) a projector and screen, and Wi-Fi. Other materials (pens, post-it notes etc.) will be supplied by the facilitators.

References

Garrison, D. R., & Vaughan, N. (2008). *Blended learning in higher education*. San Francisco: Jossey-Bass.

Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, Mass: Harvard Business Review Press.

3.2 Panel - Canada-Ireland-Chile: Comparative panel on Engineering education (room 210-211)

Chair: Ramiro Liscano (UOIT)

- Cristian Bornhardt (University La Frontera, Chile), Fiona Cranley (ITT), Hossam Kishawy (UOIT), Juan Möller (University La Frontera, Chile), Kevin Kelly (DIT), and Philip Owende (ITB)

3.3 Partners and publics II (room 212)

Chair: Bill Hunter (UOIT)

- Karen Schwartz and Adje van de Sande (Carleton), **The Challenge of Collaborating with Community Partners in Teaching a Course in Participatory Action Research**

For the last eight years, we at the School of Social Work at Carleton University in Ottawa have been teaching graduate social work students community based research. Our School has structured the Master of Social Work research course so that students in small groups engage in research with community agencies. Recently, we have been placing more emphasis on a participatory approach and encouraging community agencies in Ottawa to involve service users in the planning and implementation of the research. While our efforts have met with mixed success, we have learned a great deal about the benefits and challenges of teaching a participatory approach. In terms of benefits, the response from service users has been very positive with many stating that being involved in the research has been very empowering. Another benefit has been having service users participate in some of the university lectures on research methods so that they can more fully participate in the research process. One of the challenges has been convincing community agencies to share power with service users. Agencies have expressed concerns about the extra work required to create a research advisory committee that include service users. Another challenge has been helping the university research ethics board understand that the control of the research is not situated with a principal investigator but with a number of people including service users. The focus of our presentation will be on an evaluation of our recent experiences in promoting a participatory approach to research.

- Ulrich Rauch (Trinidad and Tobago), **More than Community Service: developing an elearning environment for the professional development of public sector workers in Trinidad and Tobago**

The Government of the Republic of Trinidad and Tobago through the Ministry of Public Administration (MPA) has partnered with The University of Trinidad and Tobago (UTT) to provide a holistic programme of online training and development for secretarial, clerical and administrative staff. The e-based competency development programme for officers is part of a broader initiative to catalyse the modernization of the MPA's Human Resource Management (HRM) portfolio by achieving identified responsibilities including organizational re-design, leadership development and HRM policy coordination. UTT provided a 'turnkey' professional development solution given its history and competence in creating and implementing e-Learning environments.

In this presentation we demonstrate the collaboration between a Ministry and a University and we also discuss the challenge such an educational technology initiative poses for a very traditional system of skill and knowledge stratification as found in the Public Service occupational hierarchy.

- **Hugh McCabe (ITB), Integrating Work Experience into the Digital Media Curriculum: A Case Study**

We present a case-study of the integration of a work experience component into an undergraduate degree in Creative Digital Media. This is a fully accredited academic module that immerses the student in a professional working environment for most of a semester. The aim is to facilitate the development of digital media skills by applying them within the workplace and to leverage the use of work-based learning in order to produce more competent, confident and employable graduates. Our case-study is informed firstly by analysis of, and reflection on, our experiences of running the programme since its inception in 2010. We describe the Creative Digital Media degree and how work experience is integrated into it, and also explain our strategies for securing, managing and assessing placements. Secondly we present the results of a substantial survey of the student experience of the process. We report on student attitudes to work experience and analyze the impact that it has on both undergraduate learning and postgraduation employment. Our findings indicate a strong belief within the graduate cohort that work experience is a valuable addition to the undergraduate programme particularly with respect to future employability. We also find that the effectiveness of the placement is closely linked to the type of organisation in which the student is placed. We conclude with some discussion of the results and some recent changes to the work experience process.

3.4 Internationalization (room 213)

Chair: Michael Owen (UOIT)

- **Lorayne Robertson (UOIT), Kavita Anand (Adhyayan), Jill Harvey, Janani Srikantha, and Damali Thomas (UOIT) Examining new vistas in Leadership Learning with Technology**

Technology-enabled learning has the potential to open new teaching and learning vistas in higher education. Moving a course to an online venue does not, however, guarantee that students will be more engaged in the learning outcomes, or that they will necessarily attend all of their classes because attending is more convenient. Nor does it mean that students will be more critical or understand the concepts covered in the course more deeply. E-learning in higher education needs to be researched carefully to determine how students' mobile activities (as they connect to people and contexts outside of school) can be harnessed to build and deepen their learning in higher education. The online classroom is emerging now as a digital learning space where students make global connections in their quests to understand the curriculum and to personalize their learning.

This research study outlines the experiences of a small group of students enrolled in the same course who were offered the opportunity outside of their course to work in a real-world cross-continental context, applying course concepts in a global professional learning community. As a result, the students were offered the opportunity to "see" their learning through the investigation of real-world scenarios taking place on another continent.

Online learning theory and intercultural competence theory are merged in a theoretical framework to guide the analysis of the students' ideas. The findings from the study indicate that innovations in e-learning and e-teaching in higher education can translate into innovative and more student-involved forms of research. The students reported that they were fully engaged

with the conversations with school leaders across the globe. Students indicated that they were better able to understand cultural differences and engage in reciprocal forms of learning. In addition, they acquired skills as researchers and were able to personalize their work in the course by applying leadership theory across cultures. The findings suggest that it would be prudent to maintain an open, investigative stance toward the potential of e-learning environments as a catalyst for more personalized forms of adult learning.

- **Paul Dervan (ITB) and Lon Appleby (Durham), The Global Classroom – Introducing a cost-effective international dimension to students’ learning**

Study abroad programmes designed to meet industry needs for graduates with inter-cultural skills and a global outlook have low participation rates in Canada and Ireland due mainly to financial barriers. Embedding the use of High Definition Interactive Videoconferencing (HD IVC) in higher education has the potential to create ‘Global Graduates’ with the skills sought by employers today. The ‘Global Class’ is a concept which has been developed at Durham College, Canada. Using HD IVC, students from different countries can participate in a ninety minute class facilitated by Durham College and led by an invited thought leader with expertise in a specific domain. Evidence from the literature suggests that (managed correctly) videoconferencing is versatile and effective in education. Moreover, feedback derived using inductive thematic research from the reflective learning logs of nineteen Irish undergraduate business students who participated in a recent Global Class on business ethics is encouraging. It points to an enriched cross-cultural learning environment suggesting the approach provides a basis for the creation of ‘Global Graduates’. Additional research will serve to further validate the approach and the practicalities of deploying the concept systematically and persistently in course curricula.

- **Angela Feeney and Brian Murphy (ITT), Internationalising the curriculum for Hospitality and Tourism students through language integration**

In an increasingly globalised world, Higher Education providers seek to further internationalise the curriculum in an effort to better prepare graduates to work and live in a rapidly changing and intercultural workplace. Jane Knight’s commonly accepted working definition for internationalization as “the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society.” One of the main barriers to increased internationalisation for us is that of language proficiency levels and the nature of teaching and learning engagement. Creating new ways of teaching and learning language that seek to engage students in a meaningful, but also, enjoyable way.

This paper explores a pilot initiative carried out among students on a BA programme in International Hospitality and Tourism Management. Students registered on this programme choose to study a language and in year three participate in an internship period abroad. However, the majority of students perceive the study of a language as something ‘apart’ from their core area of study. While these students are not language students, the pilot had as its objective to better integrate the language component into the core area of study so as to enhance the experience and ultimately to improve performance while at the same time making the language more relevant to the student learning.

As part of the pilot, language lecturers liaised with the programme team and the lecturers involved with delivering a core Hospitality and Tourism module so as to design lesson plans, and co-deliver parts of the module. Language lecturers left the classroom behind and moved

into the kitchen, the training bar and restaurant. This paper presents the qualitative and quantitative findings of this pilot initiative.

4 to 4:30 p.m. - Break

4:30 to 6 p.m. - Presidents' Forum

4.0 What can Canadian and Irish higher education learn from each other? (room 210-213)

Chair: Brian Campbell (UOIT)

- Don Lovisa (Durham), Larry McNutt (ITB), Tim McTiernan (UOIT), Mary Meaney (TU4Dublin Alliance), Thomas Stone (ITT)

7 to 9 p.m. - Reception

Robert McLaughlin Art Gallery

72 Queen Street

Thursday, November 3

8:30 to 10 a.m. - Keynote

5.0 Innovation in curriculum and pedagogy (room 210-213)

Chair: Larry McNutt (ITB)

- Tom Carey, Executive-in-Residence for Teaching and learning Innovation in British Columbia, B.C. Association of Institutes and Universities, Exploring Innovation Capability as a Graduate Attribute

Innovation, *the process of creating value by the successful mobilization of new ideas*, is a critical capability for our communities to thrive in a global knowledge economy and to address social and environmental issues. This session explores Innovation Capability as a graduate attribute – i.e., a target achievement for “the top 100%” of our students – complementing the discipline capability from a major area and the existing essential learning outcomes across programs.

What mix of knowledge, skills, experiences and mindsets are required for our graduates to be able to engage effectively with innovation practices at the individual and team levels and with innovation processes at the organizational level? For such a signature institutional outcome, what signature learning experiences will we need to develop?

The elements explored in this talk include an *Interdisciplinary Curriculum* to develop knowledge and *Experiential Learning* opportunities to develop skills and experience (as students participate in – and critically reflect on – innovations in practice). The most challenging aspect is likely to be *Faculty Models and Institutional Culture* to develop Innovation mindsets: developing Innovation Capability as a graduate attribute will require us to take seriously Parker Palmer’s maxim that “How we teach is a key part of what we teach”.

- Janette Hughes, Canada Research Chair in Technology and Pedagogy and Associate Professor in Digital Literacies at the University of Ontario Institute of Technology, Making Space for Makerspaces in Higher Education

A pedagogical approach that is currently gaining momentum in education as a way to help students develop the requisite 21st century learning competencies is the “maker movement”, which focuses on project and problem based learning, design thinking and remixing practices. The maker movement was borne out of the increasing number of people who creatively engage in both physical (or tangible) and digital fabrication to solve an existing problem or need and to share their design and making with a community of like-minded innovators. The maker movement has been described as “a theoretical and physical embodiment of constructivism that will reform how we educate students” (Roffey, 2015). The maker movement is associated primarily with Science, Technology, Engineering, and Math (STEM) or STEAM education (where there is a focus on embedding the Arts into science, technology, engineering and math). However, maker pedagogies more generally, promote important principles including inquiry, play, imagination, innovation, critical thinking, problem solving, collaboration, and personalized learning that crosses disciplines. In this session/keynote Hughes critically examines the potential and promise of the maker movement, as well as the issues and obstacles for establishing makerspaces.

10 to 10:15 a.m. - Break

10:15 to 11:45 a.m. - Sessions

6.1 Workshop - Inspiring students to achieve success: a shifting paradigm to support student learning (room 411)

Chair: Ron Collis (Durham)

- Krista Elliott and Candace Chard (UOIT)

In this session you will hear about the changes we have made to the Student Learning Centre at the University of Ontario Institute of Technology. How we, the Student Learning Centre, teamed up with academic advisors, professors, and campus partners to develop innovative supports for students. You will hear about the evolution of new approaches to our service model and how we have expanded our reach. Such concepts as the Writing Room, Math Circle, Physics Space, and Drop-ins will be highlighted, along with our peer learning programs and the summer academic transition program. We are inspiring students to achieve success by offering comprehensive programs and service options that are collaborative and meet the needs of our students. As collaboration and teamwork are key components of the work we do, this session will also allow for ample time for dialogue. Specifically, we would like to hear how others are working with university stakeholders differently in order to support students.

Historically, the Student Learning Centre at UOIT focused their support for students in two ways - the one-on-one appointment in writing, ESL, math, physics and study skills as well as focused workshops. With the growing need of support from our diverse student population it became necessary to offer alternatives to the one-on-one appointment and focused workshops, and expand our reach through peer support options and learning communities. Students benefit from collaborative learning environments and peer-to-peer interactions and as a result, a shift in our services assists both students and our small team's ability to manage the support demands.

Throughout this session, the Student Learning Centre will provide an overview of our service model, including how we collaborate, prioritize and plan our programming; what student populations we focus on; and how we solicit feedback and assess student learning. We will also facilitate activities we use when conducting workshops that encourage engagement and peer-to-peer interactions. Statistical Data will be presented to illustrate student engagement in addition to qualitative data to evaluate student learning and satisfaction.

6.2 Panel - Indigenous education: recent history and developments in Canada (room 210-211)

Chair: Cathy Bruce (Trent)

- Nicole Bell, Adam Hopkins and Dawn Lavell-Harvard (Trent)

6.3 Flipping pedagogy (room 212)

- Chair: Shaun Ferns (ITB)

- **Janette Hughes, Laura Morrison, Lauren Fridman and Terri-Lyn Jones (UOIT), Online “Maker” Modules to Support Production Pedagogies in Education**

Our research study examines the use of online maker modules (developed by our research team) on the learning process for, and professional development of, graduate M.Ed. and M.A. students in a faculty of education in Ontario, Canada. The research draws on the practice of critical making with both digital and real-world artefacts as a vehicle for collaborative knowledge sharing and generation, deep learning and meaningful engagement with one’s local and global communities. The students engaged in all five online maker modules as part of a graduate-level course and this paper offers insight into the experiences of two of these students -- how the modules impacted their learning process, professional development and their willingness to adopt an inquiry and/or production (maker) pedagogy in their own teaching and learning environments.

- **Aoife Prendergast (ITB), Challenging the Power in Critical Reflexivity in the Higher Education Classroom**

Embracing reflexive practices in higher education requires significant attention and development. Despite the widespread commitment and pressure on developing core graduate attributes such as critical reflection skills, it can be enormously difficult to assimilate this skill into teaching. The complexities of power, terminology, ambiguity in different disciplines and contexts ensure the struggle for consistent approaches in higher education. Indeed, the evidence is divided in the literature on critical thinking (Kemmis 1985), critical analysis (Boud, Keogh and Walker, 1985), reflective practice (Johns 2004; Schon 1996) and reflexivity in research (Holland 1999; Mauthner and Doucet 2003). This paper aims to explore and examine the concept of the “flipped” experience for the traditional humanities student. Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter. (Flipped Learning Network, 2014)

- **Omar Salim (Durham), The Paradoxes of Education in the 21st century: Why faculty and institutions might consider transformative learning theory as a contemporary and holistic approach to learning**

A confluence of 21st century social, economic and technological forces are creating an unprecedented demand for change in post-secondary education (PSE). In Canada, government subsidies for education are decreasing; domestic and global education competition is fierce; student enrollment, diversity and expectations are rising; institutions are more corporate; and revolutionary developments in communication and information technology are rapidly changing the academic landscape. These drivers of change are accompanied by an upsurge of new research emerging from psychology, philosophy, sociology, neuroscience and many other disciplines that are increasingly casting shadows of doubt over conventional traditional learning theories and allied pedagogical practices. In a sense, many current and dominant PSE educational philosophies run in direct contradiction with the requirements of transformative learning and learning that nurtures a creative, interdependent, ethically responsible, critically minded and democratically engaged citizenry. In this context, many Canadian PSE institutions experience a disparity between what is proudly communicated in their mission statements and presented through their marketing campaigns regarding the primacy of teaching and learning, and what is actually supported and achieved in the way learning. Consequently, this paper explores some of the forces (e.g. corporatization) responsible for intensifying the gap between research on learning, knowledge and teaching and what is currently happening in our current

PSE institutions. This paper also delves into Habermas' three forms of knowledge and transformative learning theory as possible contemporary philosophies that engage with the full dimensions of learning, and offers a relevant and revolutionary pedagogical way forward.

6.4 Student success I (room 213)

Chair: Geraldine Gray (ITB)

- Caroline Ferguson (UOIT), Correlation between Physics and Calculus Workshop Attendance and University Grades

The Student Learning Centre at the University of Ontario Institute of Technology (UOIT) offers various support services for students enrolled in first year calculus and physics courses; the most widely used of these services are focused workshops. The purpose of this study was to compare student academic performance between those who did and did not attend physics and calculus workshops. Data provided by the Office of Institutional Research and Analysis at UOIT was analyzed using pivot tables in MS Excel. Students enrolled in Physics I (PHY 1010) and Calculus I (MATH 1010) were categorized based on their Grade 12 physics (SPH4U) and calculus (MCV4U) marks, respectively. Students enrolled in Physics II (PHY 1020) and Calculus II (MATH 1020) were categorized based on their Physics I and Calculus I marks, respectively. Subgroups were then identified based on workshop attendance and correlated with first year university physics and calculus grades. Students within the same incoming grade category who did not attend any workshops served as the control group. A Pearson's Chi-square test was used to determine if statistically significant differences existed between the performance of students who attended workshops and those who did not. Analysis found that students who attended workshops had greater success rates in all first year calculus and physics courses compared to their non-workshop attending peers.

- Tessa Troughton (UOIT), Integrating Assessment From Day One in a Student Development Event

This paper explains the assessment process that was the focus of the planning of an undergraduate student academic development event, from project inception through completion. The learning outcomes for the Long Night Against Procrastination (LNAP) event in 2015 were planned based on key aspects of the home university's mission statement. The learning outcomes for the event and the university's mission statement were next woven together into the learning outcomes and success criteria of the individual workshops. The assessment of the event was planned to investigate whether, and to what extent, the success criteria had been met based on the student responses.

The academic orientation of the event focused on empowering students with strategies to plan study time, write papers, manage stress, and solve problems at mid-term. The goal of the workshops was to teach the students academic and wellness strategies to enable their success. The success criteria were assessed through administration of exit questionnaires after each workshop. The qualitative data collected clearly depicts the learning experiences of the students who attended the event. The qualitative data is matched with the success criteria of the individual workshops, permitting a commentary on the level of achievement of the success criteria and areas for improvement. Results showed that the student experience of the workshops mirrored very closely the planned success criteria. Adherence to the institutional, unit, and workshop goals throughout the planning process yielded outcomes that were closely aligned with the original goals.

11:45 a.m. to 12:30 p.m. - Lunch

Lower Level

12:30 to 2 p.m. - Sessions

7.1 Workshop - Active learning student-centered workshop (room 411)

Chair: Krista Elliott (UOIT)

- Shaun Ferns, Robert Hickey, Richie Ryan, Mark Keyes, Jonathon Cussen and Douglas Hynes (ITB)

Recent discussions in the Irish media regarding debates at the Oireachtas have put spotlight on the relevance of lectures and the efficient use of time and resources. It has been suggested that attendance rates for lectures at third level are falling as students increasingly opt to rely on online resources. In this ever evolving landscape, how can lecturers redesign the time available with students in order to enhance their learning experience.

The aim of the workshop is to share some practical experience of a pedagogical approach developed by six lecturers from the Institute of Technology Blanchardstown. The workshop facilitators have previously presented the key theoretical aspects of their approach at International Conference on Engaging Pedagogy 2015 (<http://icep.ie/>) and EdTech 2015 (<http://ilta.ie/edtech/>).

The objective of the workshop will be to:

1. Allow attendees to experience active learning first-hand based on the techniques developed by Dr Edward De Bono.
2. Demonstrate from a social constructivist point of view the value of formally and deliberately focusing the mind in order to dramatically change student's opinions and therefore their perceptions of a topic (transformative learning).
3. Exhibit how one question answered by many people can elicit all relevant information about a topic.
4. Demonstrate how these techniques can be used effectively for a variety of group sizes.

Delivered as a skills development workshop, ideal situation round tables seating 4-5 participants, minimum number - 12 participant's maximum number - 30 participants. Session would last 90 mins. As part of this workshop participants will be engaged in group activities including creating posters which will be displayed for the dissemination of key learning points to all participants

7.2 Supporting diversity (room 211)

Chair: Margaret Kinsella (ITB)

- Emmett Tuite and Lavinia McLean (ITB), Designing for difference, identifying and responding to stress among students in Ireland.

The changing face of the Irish third level education system (Dept. of Education & Skills, 2011) presents many opportunities for students entering post primary education, however there may be a need to consider the significant challenges it may also pose for these students and this paper

highlights possible issues and strategies to overcome these. The interplay between a range of environmental and personality factors are thought to lead to feelings of stress/burnout and an effective response requires intervention at an individual and organizational level. The current study sought to identify self-reported levels of stress among students classified as mature entering third level education (aged 23 years and over upon entry).

The present research is building on previous research indicating moderate to high levels of stress/burnout with academic staff (McLean & Tuite, 2014), in order to explore any possible links with the student's experience. This research utilises a quantitative research approach to identify challenges experienced by particular student groups in relation to stress and burn-out. Findings in the current study are based on a sample of 104 undergraduate students from a third level college in Ireland. The sample comprises of 54 students classified as mature (over 23 years on entry to college) and the remainder under the age of 23. Two scales were administered to the group. The 10 item perceived stress scale (Cohen 1983) and the 28 item COPE inventory (Carver 1989) in the second semester of the 2015/16 academic year. The Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983) has previously been used to identify perceived levels of stress in a broad population of college students. The scale is intended to assess the extent to which respondents found their lives unpredictable, uncontrollable and overloading and is proposed by the developers as being a more consistent indicator of stress levels than questionnaires based on recounting of specific life events which are perceived to be stressful. In addition to administration of the scale this study utilises a range of basic demographic questions and a small number of questions related to sources of support and effective mechanisms to manage stress arising a part of academic participation.

- **Sheldene Simola (Trent), Cultivating Diversity, Resilience and Creativity in Higher Education: A Relational-Cultural Perspective**

The inclusion of diverse people and perspectives, the presence of resilience, and, the use of creative thinking to promote innovation are often seen as markers of healthy and health sustaining organizations, communities and societies. Yet, despite the need to develop these qualities, conventional teaching practices still often reflect individualist models that have been criticized for their limitations in promoting these ends. This article offers and describes an alternative, relational teaching approach that is well-suited to the cultivation of diversity, resilience and creativity, namely that which is grounded in relational cultural theory. Six pragmatic guidelines that characterize a relational cultural teaching approach are described.

- **Wesley Crichlow (UOIT), Racialization Decolonization and Canadian University Immigrant Students**

Racial and racialized gaps in scholarly knowledge achievement about families can be attributed to how we value (i.e., not erase) our differences and equitably share power in the classroom as students and professors. As a Black, gay, immigrant professor, I understand my duties and responsibilities to include advocacy for and with Black, LGBTQ and racial minority students, including in the study of racialized and immigrant families. I have found joy in working with Black and racialized students as a way to challenge past ruins. Indeed, in my support of decolonizing education, learning/unlearning/re-learning, retention and success within the white academy, I have experienced the importance of hearing racialized students' powerful testimonies of family in order to validate their contemporary lived experiences. I have heard of how the socio-cultural context experienced by some immigrant families places them at a starting disadvantage; hence, parents are seen as the source of children's skill-gaps before they enter school. Other examples from my thirteen years of teaching and employing storytelling and

social justice pedagogy in the university classroom setting are highlighted to stress the importance of re-learning racialized and/or immigrant students' family meanings, practices, and processes through their own voices.

7.3 Designing system and institutional change I (room 212)

Chair: Alyson King (UOIT)

- Ann Conway (DIT), The effects of change on culture and identities: A case study of a higher educational institution undergoing transformation

The primary aim of the research was to identify drivers of change and mergers in higher education. It was then reflected on how changes and mergers impact on cultures and professional academic identities. The case study is based on review of government policies and institutional strategy documents looking towards the future and determining how they are affecting the current situation in the Institution. This was conducted via analysis of interviews and observations at meetings and classes, and via use of discourse analysis of some policy and strategy documents. The interviewees were asked about their views on which factors bring about strategic change from both external and internal drivers and how these drivers impact on their own culture and professional academic identities. They also discussed possible future mergers in higher education.

- Lorayne Robertson and Wendy Barber (UOIT), But is it Transformative? Quality assurance as co-learning in Graduate Education

This paper describes a comparative type of research intended to define more closely the concept of *quality* in online graduate education courses. This is done by examining how graduate students in two courses identify quality learning experiences and comparing this to the outputs from a quantitative quality measurement administered by the institution. First, the literature on quality assurance in adult learning and online learning is examined, leading to the design of a theoretical framework which is used to analyze the data. Data sources include multiple learning outputs of online courses such as assignments and learning logs to determine if there are similarities between what students consider important to their learning, and externally-initiated measures of quality.

Quality in higher education is critically important, but the means to establish quality assurance has been somewhat illusive in academia (Anderson, G., 2006). There are tensions evident in the processes – while they are designed to provide opportunities for faculty to reflect on their practice and identify potential areas of strength and growth, the process of program review is generally not course-specific. Also, the review process frequently relies on an external body that identifies and seeks evidence that the program is meeting established standards. The faculty may not perceive that this process benefits faculty (Anderson, G., 2006). Barrow (1999) employs the term “dramaturgical compliance” implying that the process of quality assurance in a program review can be similar to a stage play which is carefully presented for an audience.

Because the graduate classes were taught in the online synchronous mode through real-time video conferencing, the analysis framework relies heavily on Garrison, Anderson T., and Archer's (2001) elements of online courses which include: *social presence*, *cognitive presence*, and *teaching presence*. A second key consideration in the quality analysis framework was the concept of building community in distance learning programs (e.g., Aragon, 2003; Garrison et al., 2001). A third, key consideration was the identification of transformative elements (Mezirow, 1990). The findings of this study provide evidence that quality assurance in course delivery is enriched by processes through which the instructor seeks the kinds of feedback which the students identify as significant to their learning.

- Tom Doyle (ITB), **Applying Recent Organizational Theories to the Design of Institutions and Systems of Higher Education**

Higher education institutes are urged to adopt organizational forms that are more flexible and responsive to continuous change and complexity in modern society, to be more accountable to all stakeholders and more entrepreneurial in their approach to obtaining resources. For the most part, the organizational forms being advocated are grounded in traditional theories of organization that emphasize a rational approach to the setting and monitoring of goals for organizational strategy and resource management. The paper briefly reviews the origins of this rational model, and its limitations, and compares it to emergent theories of organizational change and development based on an alternative philosophy of science. It suggests that these emergent theories can better clarify the sources and patterns of environmental complexity, and assist policy makers and institutional leaders in higher education to resolve the inherent tensions in such fields. It describes how such theories lead us to rethink the core organizational issues of strategy, structure and leadership and considers the practical implications for the design and management of HEIs.

7.4 Technology and learning (room 213)

Chair: Paul Stacey (ITB)

- Tanner Mirrlees and Shahid Alvi (UOIT), **Technological Citizenship in Higher Education**

This paper offers a critical political-economy of the promise and disappointment of the for-profit MOOC in higher education. Our goal is to encourage awareness, dialogue, and reflexivity about the gap between the rhetoric and reality of the MOOC in higher education and to highlight and interrogate the persuasive and profit power interests served by “the rhetoric of the MOOC.” To this end, the first section outlines our critical approach and defines some key concepts: “the rhetoric of technology,” “the political-economy of edu-tech” and “the public sphere.” The second section highlights the MOOC’s rhetorical promises and real disappointments. The third section contextualizes the “rhetoric of the MOOC” with regard to the persuasive and profit power interests it serves, and then evaluates this rhetoric with regard to the norms and values of the public sphere. We argue this rhetoric is a promotional discourse that is a poor guide to public deliberation and decision making about the role of technology in higher education. In closing, we propose the ideal and practice “technological citizenship” to encourage policy-makers, administrators, professors and students to have more democratic dialogue about educational technology, so that they, not the rhetoric of educational technology and the industry that sells it, can design the future of higher education.

- Wendy Barber, Maurice DiGiuseppe, Roland Van Oostveen, Todd Blayone, and Jaymie Koroluk (UOIT), **Examining Student and Educator use of Digital Technology in an Online World**

Over the past thirty years, institutions of higher learning across the world have been increasingly embracing digital technology for teaching and learning. Many institutions have begun to offer mobile, hybrid, and online courses and programs for enhanced relevance and accessibility. Universities and colleges may employ educational digital technology in various ways and for varied purposes, including use of learning management systems (LMSs) for maintaining and processing educational information/records, and providing a medium for offering blended/hybrid learning that promotes asynchronous online student/instructor interaction and collaboration, and use of LMSs and web conferencing software such as Adobe Connect or WebEx for synchronous and asynchronous virtual classroom functionality. Thus, it

is critical for us to gain a better understanding the nature of these technological changes and the factors affecting the online realities of 21st Century teaching and learning.

The study reported here involved students and instructors at the University of Ontario Institute of Technology (UOIT) in Oshawa, Ontario, Canada completing an online survey in February, 2016, called the *General Technology Competency and Use (GTCU) Survey*, in which they assessed the purpose (educational or professional) for which they used a variety of digital technologies; the frequency with which they used those technologies (choices ranging from never to daily), and the confidence they had in using various digital technologies (choices ranging from not knowing how to use a system or device to being very confident in using it). Preliminary results indicated consistently high scores in both confidence and frequency of use for computers/laptops and smartphones, and consistently low scores for frequency of use and confidence in the use of more leading edge systems and technologies, such as “wearables” and the “Internet of Things”.

- Michael Bruder (Trent), *Virtual Virtue: A digital-Aristotelian approach to Twenty-first century professional ethics courses*

Interactive simulations involving virtual patients (VPs) are becoming increasingly common as a teaching tool in the medical profession. Ethics virtual patient (EVP) cases are also becoming prominent as an effective means of teaching professional ethics in a medical context. This paper begins with an understanding that virtue ethics is a prominent current approach to medical ethics and a) demonstrates how the EVP method of ethical education is consistent with the process of ethical education described by Aristotle in his *Nicomachean Ethics* and further, b) argues that understanding Aristotle’s rationale for this process, and his insistence on habituation as prerequisite for ethical reasoning, will help us more effectively apply this method to ethical education.

2 to 2:30 p.m. - Break

2:30 to 4 p.m. - Sessions

8.1 Workshop - How can we develop and sustain a distinctive excellence in teaching and learning (and be recognized for doing so)? Part 1 (room 411)

Chair: Mary Meaney (TU4D)

- Tom Carey, Salvador Ferreras and Stephanie Chu (KPU), Larry McNutt (ITB)

Our initial discussion in the workshop centres on the goal posed in the title: When all of our higher education institutions claim to be excellent in teaching and learning, how can an institution like ours – with teaching at its heart and a distinctive mandate as its compass – develop and sustain a distinctive excellence in teaching and learning...and be recognized for doing so? We believe that our mission and our students will be ideally positioned for ongoing success when our teaching and learning environment is recognized as exemplary beyond our particular work domains, student cohorts and credential types

That is, we want to drop the parenthetical qualifiers from recognition as “great work (for a technical institute)” or “doing very well (for a polytechnic university)”. We want to be – and be seen as – an exemplar in aspects of teaching and learning which are critical to our mission and

from which many other types of higher education institutions can benefit from our success...in our own regional system and beyond.

The workshop will begin with an Overview session in which we'll focus on five hypotheses we are using as a framework for thinking about how to develop and demonstrate exemplary teaching and learning. After a summary of the hypotheses, you as participants will decide which ones to explore...including more explanation, examples of initial steps in Canada and beyond, and implications for ongoing action on those with the best fit for your context.

The workshop organizers have prepared summaries of the initial steps toward this goal at their home institutions, including the challenges and issues where we are particularly keen to share experiences and insights with other workshop participants. Our intent is to present these as Case Studies, although we also expect that glimpses of these initial steps will also arise as illustrations in the Overview session.

We expect at least two additional Case Studies to be contributed by other participants, which will allow for 15-20 minutes per Case Study.

8.2 Panel - Canada – Ireland – Trinidad and Tobago: comparative panel on student services (room 210-211)

Chair: Kevin Dougherty (Durham)

- Meri Kim Oliver (Durham), Olivia Petrie (UOIT), Eileen Quinn (ITB), Letitia Williams (Trinidad and Tobago)

High quality student support services are a requirement for any post-secondary institution, and are even more vital to institutions undergoing serious changes, such as amalgamations of institutions or campuses, or rapid expansion. This panel proposes to discuss experiences of student support services units within the context of institutional transformation, from the perspectives of institutions from three distinct countries: Canada, Ireland, and Trinidad and Tobago.

8.3 Designing system and institutional change II (room 212)

Chair: Maurice DiGiuseppe (UOIT)

- Michael Rostek (UOIT), Making Sense of the Future of Post Secondary Education

1. The complexity and uncertainty of today's global environment has created a bewildering array of interactions and interdependencies across all societal sectors including the educational sector. While many believe that modern communication and information technology reduces uncertainty and complexity, paradoxically, the "...real effect is the opposite: information overload leads to a "poverty of attention" that complicates the process of filtering out the critical signals from the distracting noise." Past methods for examining and understating this environment have proven to be ineffective in this fast-moving environment and sector leaders are now required to systematically assess their environment "...in order to reduce surprises, to increase the room for manoeuvre, and to improve the overall flexibility of governance."

2. Increasingly, strategic foresight is used to respond to this new environment. "Foresight is the ability to see developments before they become trends, to recognize patterns before they emerge, and to grasp the features of social currents that are likely to have an impact; it is not the ability to make predictions." The term strategic foresight is used here to acknowledge the close association between foresight and strategic planning. As such, strategic foresight is a growing international discipline designed to "...critically examine the difficulties associated with making

decisions with long term future consequences in conditions of uncertainty and to provide methods through which these difficulties can be minimised and a creative approach to the future adopted.”

3. Strategic foresight can lead to value creation for an organization in a variety of ways; increasing innovative capacity, situational awareness in advance of strategic planning, perceiving and interpreting changes in the operational environment, or simply provide a common platform designed to foster discussion concerning the long-term future of an organization. In whatever form, organizations today are increasingly turning to strategic foresight to better understand the complex and rapidly changing environment within which they must function.

4. This paper will examine the use of strategic foresight in support of designing higher education systems. I will begin with an examination of the contextual environment within which universities must function yet wield little control. Next, through the application of strategic foresight tools, a scenario set will be described thereby demonstrating how an institution can make sense of its contextual environment. The paper will conclude with a description of how the ideas and capabilities within the future scenario set can be harvested today allowing universities to better position themselves for tomorrow.

- **Deborah Brennan (DIT), The Evolution of a Stakeholder Model for Three Merging Institutes of Technology in Terms of Policy Definition and Control of Implementation**

As the Dublin Institute of Technology (DIT) prepares to amalgamate with the Institute of Technology Blanchardstown (ITB) and Institute of Technology Tallaght (ITT) in advance of becoming a technical university, we revisit a Doctoral case study completed in 2008. This study questioned how DIT might become better able to respond quickly and appropriately to the radically changing environment it then faced. We mirror this research in 2016 using the same Conceptual Framework with the aim of comparing what the two groups of DIT stakeholders viewed to be the best model for change almost a decade apart. In 2008, it was felt that the classic entrepreneurial university model from the USA was unlikely to be successful in the Irish context, largely because of the DIT’s inability to raise money on the scale of the US model. The current research broadly upholds this view. Notwithstanding increased pressures on finance, the corporate model using managerialist practice was yet again rejected by stakeholders in 2016. In both 2008 and again in 2016, it was concluded that a European style of University with Collegial Innovation was the most appropriate model, particularly in relation to bottom up innovation and industry and community ties. What was perceived as excessive bureaucracy in 2008 was considered to have increased by 2016 and current stakeholders fear that the culture of bureaucracy will survive beyond the merger of the three Institutes, hampering progress and stifling innovation. In general, the research indicates that today’s stakeholder has a clear understanding of DIT as an institution geared to wards excellence in teaching while embracing research and innovation. However, there is more fear for the future and the stakeholder is less convinced that change will happen on a large enough scale and at a fast enough pace for the new, merged Institute for survive and prosper into the 21st century. Now, more than ever, it would seem, that the culture and power residing within the organisation must be acknowledged in the process of change.

- Ramiro Liscano, Don Toporowski, John Komar and Gary Elfstrom (UOIT), On the Transformation of the UOIT Automotive Centre (ACE) from a commercial entity into a Centre for Research, Education, Community Outreach and Commercial Partnerships

The Automotive Centre of Excellence (ACE) at the University of Ontario Institute of Technology is a research and development facility that offers chambers and technology for thermal management and aerodynamics including structural durability and life-cycle testing. Facilities include one of the largest and most sophisticated climatic wind tunnels (CWT) on the planet. ACE is a university-owned and operated research and development facility that commenced operations in 2011. Its original mandate was focused on the research and engineering development of automotive systems with an emphasis on Industry partnerships. Over the years ACE has diversified its market sectors and increased its community involvement and education. This paper will present examples of how ACE has interacted with the community and education sector to help transform the educational experience of not only students but the community at whole. It will discuss how revenue generation has been balanced to support educational and training needs. ACE also promotes research projects with the university and its impact and challenges in this area will be presented in the paper.

8.4 Re-engaging academic skills I (room 213)

Chair: Jaymie Koroluk (UOIT)

- Janette Hughes, Jennifer Laffier, Ami Mamolo, Laura Morrison and Diana Petrarca (UOIT), Full STEAM Ahead: Building Preservice Teachers' Capacity in Makerspace Pedagogies

The classroom landscape is changing rapidly with schools transitioning to BYOD programs as a way to engage students and to prepare them for the real world. As a result of increased technology in the classrooms, there has been a shift in pedagogy to a more student-centered model. Students now have increased autonomy over the tools they use in class to complete assignments and they have ubiquitous access to information from the Internet. As a result, teachers are being repositioned in the classroom as facilitators and guides in the learning process. Classrooms have become transformation-based, rather than transmission-based learning environments. However, some pre-service teacher education programs do not always adequately prepare teacher candidates for this reformed teaching and learning structure that draws heavily on technology, collaboration and problem-based learning (Horizon Report, 2015, p. 28). One way to address the upskilling of pre-service and in-service teachers is to offer them professional development in the area of makerspaces as these are creative, educational, collaborative spaces that capitalize on current technology and help prepare students with the kinds of skills required for active participation in modern society – politically, socially and economically. The 2015 Horizon report indicates that “Makerspaces are places where anyone, regardless of age or experience, can exercise their ingenuity to construct tangible products. For this reason, many schools are seeing their potential to engage learners in hands-on learning activities” (p. 38). The educational benefit of makerspaces reflects a clear need for professional development for pre-service and in-service teachers and a pressing need to simultaneously incorporate makerspaces into schools to keep pace with society and students' out-of-school literacy practices.

In this research project we explore teacher candidates' understandings of 1) makerspace/constructionist pedagogies; 2) the issue of bullying; and, 3) working with at-risk youth, as they evolved over the course of a six-month partnership. The partnership included

researchers and teacher candidates at a Faculty of Education and teachers and the teacher-librarian at a local elementary school who were participating in a larger SSHRC-funded project that focuses on building, implementing and evaluating an effective model for a school improvement program that increases teachers' capacity, experience and specific fluency and expertise with technologies supporting STEAM learning and digital literacies. In this presentation, we discuss qualitative ethnographic case study research, which examines in depth the experiences of five teacher candidates as they work with 20 students in a grade 6 class in a high needs school on makerspace activities related to bullying prevention in their school community. Qualitative research documentation includes digital video and audio recordings, on-the-ground field notes and observational notes, pre and post interviews with participants and focus group sessions. Results from this study contribute new knowledge in the areas of pre-service teacher development and digitally-enhanced learning environments for K-6 learners.

- **Lorna Lawless (ITB), A Survey of Emotional Wellbeing among Irish Third level Educators**

This study analysed the results of a survey aiming to gain baseline scores of perceived levels of work-related stress, self-efficacy, emotional intelligence and wellbeing for Irish third level educators. The survey has received 475 responses to date 38% university, 48% Institute of Technology, 11% college of education, 2% other. Using a mixed methods approach, analysis was carried to see if scores across these variables differ between various sectors in Irish higher education. Quantitative analysis using a one-way ANOVA found a significant difference, with higher levels of work related stress being reported by university lecturers in comparison to IOT lecturers. Qualitative results using content analysis examined lecturers' beliefs and attitudes towards coaching in the area of emotional and social skills. The findings indicate that the changing nature of HE is having an adverse impact on staff in this sector. The results of this analysis are discussed below.

- **Martha Cleveland-Innes (Athabasca), Niall Seery and Adrian OConnor (Limerick), Identifying, Developing and Grading Soft Skills in Higher Education**

In higher education, the term 'soft skills' is often used interchangeably with transversal (crosscurricular) competences, i.e. those that are horizontal, cross-disciplinary, and not subjectspecific. The European Commission (EC) Eurydice Network (2011) identified a number of soft skills, e.g. creativity, innovation, problem solving and collaboration, critical thinking, reflection, decision making, and social competences. Strategically targeting the development of these skills requires the recognition of key qualities, the capacity to discriminate between these qualities and a mechanism to validly and reliability grade soft skill acquisition. Teachers and students alike must take cognisance of the sophisticated relationships between acquiring content knowledge and soft skills through specific ways of thinking and working. This study, which is part of a 3-year longitudinal research project financially supported by the European Union is being developed with the support of the Lifelong Learning Programme (LLP), the flagship European funding programme in the field of education and training. The work presented in this paper outlines a technological approach for the assessment of soft skills that has been designed for implementation in the initial phase of the ASSIST project. ASSIST (Assessing Soft Skills in Student Teachers) is a multi-disciplinary awards initiative launched in September 2015 and open to Final Year Students of Initial Technology Teacher Education (ITTE) degree programmes in the University of Limerick. This project focuses on developing pedagogical approaches and ICT tools and services for representing soft skills which are aligned with the University of Limerick's Graduate Attributes in a quantitative, measurable way, so that they can become the subject of formal validation and recognition. These are: Articulate, Collaborative, Creative, Knowledgeable, Proactive, and Responsible.

The research proposes a technological infrastructure that acknowledges the importance of self-assessment, peer observation and teacher evaluation when adjudicating on subjective and often personal data. The proposal has the capacity to balance, weight, and triangulate the objective and subjective evidence of soft skill acquisition ensuring the validity and reliability of the resultant accreditation. Accreditation of soft skills was in the form of digital badges. The ASSIST Digital Badges were designed to be awarded to participants who successfully acquire and demonstrate evidence of the University of Limerick Graduate Attributes. Each of the Graduate Attributes Badges are made up of 4 individual Soft Skill Badges which first have to be unlocked before achieving the corresponding Graduate Attribute Badge. To unlock each of the Soft Skill Badges, participants must submit authentic multi-modal evidence of the particular soft skill for review to the ASSIST Project Team. When all 6 Graduate Attribute Badges have been accredited, participants will be presented with the ASSIST Digital Award. Using the proposed technological approach, the identification, development and grading of soft skills can be reviewed, tracked and managed over time to demonstrate competencies with respect to both the context and situation. The technological approach empowers stakeholders as critical partners within the assessment process and supports the ecological validity of their judgements based on the evidence submitted for accreditation. Reliability is strengthened by the triangulation of these judgements. Though more significantly, the technological approach facilitates the capacity to weight stakeholders' decisions relative to the context and situation.

4 to 4:30 p.m. - Break

4:30 to 6 p.m. - Sessions

9.1 Workshop - How can we develop and sustain a distinctive excellence in teaching and learning (and be recognized for doing so)? Part 2 (room 411)

Chair: Mary Meaney (TU4D)

- Tom Carey, Salvador Ferreras and Stephanie Chu (KPU), (2 sessions)

A continuation of session 8.1. See description above.

9.2 Re-engaging academic skills II (room 211)

Chair: Wendy Barber (UOIT)

- Howard Doughty (Seneca), Critical Skills and Critical Pedagogy in an Era of "Permanent Crisis" in Postsecondary Education

"Critical thinking" is widely celebrated as a "soft" employability skill, akin to the communications and human relations capabilities deemed essential for work in the precarious twenty-first-century labour market. It is said to enhance problem-solving and to contribute to the nimbleness of employees negotiating an increasingly competitive global economy. It is also an essentially contested concept. To practitioners of "critical pedagogy," it helps to interrogate power and authority. It regards education as a "moral" and a "political" project—moral in distinguishing between right and wrong, and political in promoting good and obstructing evil. The resulting tension between those working within the existing political economy and those seeking emancipation by restructuring social domination and technological control will be shown in a discussion of educators inspired by Paulo Freire, Ivan Illich and Herbert Marcuse

and guided by theorists and practitioners such Michael R. Welton and Henry A. Giroux. Their work in a vexed, conflicted neoliberal society facing ecological degradation, economic inequity, human rights abuses, technologically mediated incivility, a pervasive democratic deficit and a seemingly permanent crisis in postsecondary education will be "critically" examined.

- **Ron Collis (Durham) and Maureen Reed (Ryerson), Non-traditional Students, Non-traditional Teaching: Pathways to Academic Success Include Resourcefulness and Adaptation Skills**

Today, students entering higher education are diverse and include many students who in previous generations did not attend higher education. Research shows that these non-traditional students (e.g. first generation students, students with disabilities, older students) often feel less prepared for higher education (Reed et al., 2006; Stebleton & Soria, 2012; Zafft, 2008). An option for non-traditional students seeking entry to university or professional programmes is to upgrade their academic skill through college pathway programmes. Regardless of how one might come to higher education, being prepared in higher education involves resourcefulness and resilience. Highly resourceful students use a number of self-management strategies when faced with challenges (Rosenbaum, 1990; Kennett & Keefer, 2006). Akgun and Ciarrochi (2003) showed that while high resourceful and low resourceful students face similar academic stresses, there is a greater impact of that stress on the performance of low resourceful students. Indeed, resourcefulness is predictive of student belief in their academic abilities, university adaptation, and higher grades (Kennett & Keefer 2006; Kennett & Reed 2009). Yet, non-traditional students are frequently less resourceful, less adapted and less able to balance their multiple academic and non-academic roles (Reed & Kennett, 2016; Reed, Kennett, & Emond, 2015). Here, we examine the concept of resourcefulness and resilience in today's higher education classroom. We argue that, given the diversity of the student population, strategies should be implemented within programs, such as pathways programs, to increase student resourcefulness and resilience as both will have far reaching benefits in higher education and beyond.

- **Sheldene Simola (Trent), Managing for Academic Integrity in Higher Education: Some Surprising Insights from Behavioral Ethics**

Despite the plethora of research on factors associated with academic dishonesty and ways of averting it, such dishonesty remains a significant concern. Moreover, there is a need for overarching frameworks through which current research might be integratively understood. Hence, this article draws upon the burgeoning field of behavioral ethics in order to offer an integrative framework through which academic dishonesty might be understood; to provide additional, often counterintuitive insights into its prevention; and, to identify directions for future research. Six key themes for understanding academic (dis)honesty through the lens of behavioral ethics are provided. These elucidate the role not simply of reflective, conscious deliberation, but also of reflexive, non-conscious judgment; the role not simply of rationality, but also of emotionality; and also identify the ways in which both conscious and nonconscious priming can cause moral identity, moral standards or other factors to become more salient in, and influential to decision-making.

9.3 Designing system and institutional change III (room 212)

Chair: Michael Rostek (UOIT)

- **David Irwin (TU4D), Curriculum Re-definitions and Transformations**

Within a technological university there ought to be an understanding of the kind of education students should possess on graduation. A primary consideration in such an institution is the

requirement to "transmit knowledge and universal values and, at the same time, to contribute to the cultural, economic and social development of the local societies that they serve and that support them". This paper explores how a curriculum can be (re)shaped in a technological university context to address this requirement.

As a socially distributable commodity knowledge shapes and is shaped by the form, context and content of the curriculum of a technological university, and as such possesses five distinguishing characteristics. First of all places where research is being carried out competently it is clearly ascertainable; second, tributarial communication networks are established between different constituencies engaged in curriculum transformation; third, the range of connectivity between knowledge producers operates outside of disciplinary silos and is oriented to problem-solving; fourth, connections follow the paths of problem interest the ebb and flow of which (re)forms in response to new paths of problem interest; and fifth, knowledge production is heterogeneous and characterised by expanding participation networks which in turn create new forms of knowledge and opportunity.

The net effect of this five-dimensional model is a curriculum that provides opportunities for learner transformation through empowerment so that learners can have confidence to seize opportunities, to become more innovative, and to be more entrepreneurial and less risk-averse. Within the context of the technological university for Dublin context the five-dimensional model presents a proposition to contextualise programme transformation in the proposed technological university. The paper also proposes a mechanism through which debate within the academic community can be grounded in principles capable of sustaining coherent and comprehensive curriculum transformation. The net impact of such a process is a set of graduate attributes that supports the enhancement-making potential of education in a technological university for society as a public good.

- **Margaret Fingleton (ITT) and Fiona McSweeney (DIT), A collaborative approach to designing an MA Social Research in response to the changing higher education and social environment in Ireland**

The aim of this paper is to share the experience of and the rationale behind the development of a new post-graduate programme in social research for the purpose of generating discussion with other higher education institutions. The context in which the programme is being developed is the changing educational landscape and goals of higher education in Ireland, which have as a focus a streamlining of resources through mergers, increase research and student capability along with ensuring that higher education meets its economic and social obligations through engagement with society. The social care sector is also undergoing significant changes with regard to professionalisation, reduced funding and new ways in the provision of services. In this paper the influences of the objectives of higher education as well as the value of consultation and collaboration with our industry partners both in social research and social care on the development of the programme are discussed.

- **Alyson King and Shirley Van Nuland (UOIT), Creating a New University in a Time of Political and Economic Conservatism**

The University of Ontario Institute of Technology (UOIT) was the first new university to be established in Ontario in forty years and was created in a time of fiscal austerity by a Conservative government led by a Premier with a reputation for anti-intellectualism. In many ways, UOIT represents a new way of thinking about the nature of higher education that was prevalent at the time; in other ways, it was unable to effect a significant redesign of its curriculum, administration, or structure.

9.4 Engineering pedagogy (room 213)

Chair: Philip Owende (ITB)

- Paul Stacey and Michelle Looby (ITB), Reflections on the Adaptation of DIT's RoboSumo Robot Building Initiative within ITB's Professional Development for Engineers Module

This paper details a pilot initiative within the Engineering Department at the Institute of Technology Blanchardstown (ITB) where a team-based competitive robot building activity has been embedded within the 1st year module Professional Development for Engineers. As part of the 2015 programmatic review process at ITB, an existing 1st year module Personal Development was significantly re-designed. The resulting module Professional Development for Engineers was delivered to Engineering students in Semester 1 of year 1 of the 2015/16 academic year. One of the core aims of this initiative is to enhance the 1st year engineering student experience.

The initiative is an adaptation of a robot building activity run within the School of Electrical & Electronic Engineering at the Dublin Institute of Technology (DIT). The Authors, as part of a larger ITB programme design team, partnered with DIT to deliver a series of workshops to ITB Staff. Arising from this work, ITB have adapted a slimmed down approach within the Professional Development for Engineers module.

The curriculum design approach taken is outlined including the challenges that were encountered. An action plan for improvement of the next iteration is detailed; informed by an evaluation and analysis of the initial pilot project.

- Catherine Deegan (ITB), Designing Innovative Engineering Programmes: a review of the process for the development of a multi-campus MEng programme

This paper details the process of designing a new masters in engineering programme under the Programmes for the Future initiative of the Technological University for Dublin (TU4D) consortium. Several staff from the Institute of Technology Blanchardstown, the Dublin Institute of Technology And the Institute of Technology Tallaght joined together to develop a highly innovative masters programme in the Internet of Things Technologies. The 'Internet of Things' is a recently-coined term that refers to the interconnections between all manner of electronic devices with an addressable interface that may be communicated with online. The engineering schools in each of the referred three institutes of technology produce ICT graduates who are equipped to work at graduate level in this exciting new industry, however a demand for higher level, more specialised qualifications is emerging, from industry employers and our undergraduate cohort themselves. This programme needs to be both high tech and a fully accessible(i.e. facilitated by online delivery) at the same time to meet our diverse learner needs, so much attention needs to be given to programme design, delivery and assessment. Third level education in Ireland at present is undergoing a period of significant change. With the recent publication of the new Technological Universities bill for discussion in the Irish parliament, a merger of the three referred institutes of technology and subsequent bid to Technological University status is now a close reality. This new programme is being presented for validation in a background of significant political, institutional and organisational uncertainty as a result. This paper will present a discussion of the challenges posed by same, as well as the significant innovation opportunities arising in a rapidly changing educational environment.

- **Marc Rosen (UOIT) and Dan Zhang (York), A Teaching Module for Engineers on Robotic Safety: Approaches and Effectiveness**

A teaching module recently developed by the authors for engineers on robotic safety using various approaches (Powerpoint presentation and written document) is described and an assessment of the effectiveness of using the module is presented. The effectiveness of the teaching module and its different approaches is assessed by using it in a class setting, and surveying the opinions of the students. The content delivery approaches and learning approaches are also assessed, based on student opinions. The teaching module is determined to be effective at promoting student learning on robotics safety, and to offer multiple useful delivery modes. The teaching module thus allows students with different learning preferences to exploit the delivery mode the find most suitable.

7 p.m. - Reception and Dinner

Oshawa Golf and Curling Club

160 Alexandra Street

Friday, November 4

8:30 to 10 a.m. - Keynote

10.0 Student needs, goals and trajectories (room 210-213)

Chair: Brian Campbell (UOIT)

- Geraldine Gray, Lecturer, Institute of Technology, Blanchardstown, Ireland, The potential and limitations of learning analytics in tertiary education

Learning analytics is an evolving discipline with a focus on analysis of educational data to enable better understanding of the learning processes. Tertiary education providers collect a lot of data on students including activity data from virtual learning environments and other online resources. Resulting data models, aimed at offering greater insight into the learning process, have reported promising results in the prediction of student retention and progression. Research has identified a range of factors that directly or indirectly relate to academic performance. In particular, factors of prior academic performance, and non-cognitive factors of personality, motivation, self-regulation and approaches to learning. However, there is a lack of consensus on an optimal model of learning, indicating the inherent difficulty in both measurement of learning and modeling learning process. The difficulty is reflective of the diversity in student populations and their individual learning experiences. This keynote will explore the potential and limitations of learning analytics models that aim to both explain the learning process and inform appropriate supports and interventions for students at risk of failing.

- Rod Skinkle, President of Academica Group, Trends in Higher Education demand: Implications for the Academy

What you are doing here today, is in my view, very much aligned with what we are seeing as the most important needs & opportunities for the postsecondary education sector.

At Academica Group, we strive to ‘Support and Inspire Higher Education’. Why – because we are passionate about HE and it is our sole focus. How - we do so by providing Research, Consulting, and Content for the sector’. As a private sector partner, working with individual institutions, NGO’s, governments, and monitoring trends (in Canada & internationally) we have a somewhat unique perspective.

I understand that you are getting together to create opportunities to collaborate, share challenges, successes, and most of all to look for opportunities to innovate – all in order to help lead your institutions ever forward – through a period when PSE is experiencing a great deal of change. We all know that change is challenging, creates stress, but is also a time of great opportunity.

From this perspective, I will put forward for your consideration two (just 2) key opportunity areas. Both present enormous opportunity to help transform your institutions and both stem from macro-level trends that we have found in our ongoing research and work. The first, (which I will argue you are not attending to very well – as it is not much on your radar screens) concerns the rising importance of what I will call **education and career goal development**; and the second (which I believe you are moving on – and which represents an irreversible trend) concerns the growing need for **more applied research through institutional collaborations and industry-based partnerships**.

These are not disparate topics. They are fundamentally connected. You are all institutional leaders so my goal, in taking your valuable time today, is two-fold: 1) move the first opportunity (E&CGD) up in importance by demonstrating both need and viability; and 2) to help fertilize the growth and entrenchment of Applied Research across PSE.

10 to 10:15 a.m. - Break

10:15 to 11:45 a.m. - Sessions

11.1 Workshop - Proactively designing mental health supports for university students: The UOIT experience (room 213)

Chair: Meri Kim Oliver (Durham)

- Jennifer Laffier and Olivia Petrie (UOIT)

The University of Ontario Institute of Technology (UOIT) strategic plan identifies a number of priorities relating to the student experience, including calls for the development of programs that address mental health awareness, intervention and other student wellness initiatives. Post-secondary student mental health is a topic that has recently come to the forefront of discussions at many universities and colleges across Canada. In the past decade post-secondary students seeking assistance for serious mental health problems has intensified exponentially (Eiser, 2011). In order to proactively identify the health concerns of students, UOIT participated in the National College Health Assessment (NCHA) survey (2013), which was completed by 34,039 students at 32 Canadian postsecondary campuses, including some 548 students from UOIT. In the national results, respondents reported having experienced the following mental health difficulties within the last 12 months: (1) 37.5% had felt so depressed it was difficult to function, (2) 56.4% had felt overwhelming anxiety, (3) 9.5% had seriously considered suicide, and (4) 19.8% had been diagnosed with or treated for a mental health condition (ACHA, 2013).

Positive mental health can support student retention rates and success, especially for first year or first generation students and students with learning or physical exceptionalities (MacKean, 2011). Therefore, in an effort to pursue the mental health focus of the strategic plan and address the findings of the survey UOIT's Student Life centre has worked towards evaluating, enhancing, and designing student mental health supports as well as reviewing possible future directions. New initiatives since the NCHA survey include expanding counselling services, providing awareness workshops and mindfulness seminars for students, designing a 'Campus Connected' campaign, and hosting Mental Health First Aid and Suicide Intervention certification for staff and students. Future directions being reviewed are online counseling services and support groups for students, peer to peer training, and workshops for educators on mental health accommodations. UOIT is participating again in the delivery of the NCHA for Spring, 2016. These additional results will provide further insight into students' needs and the value and need of current and future initiatives at UOIT.

In this presentation the national NCHA results will be shared, along with a comparison between the 2013 and 2016 results. The programs and initiatives being developed by The Student Life centre at UOIT will then be presented as they align with the NCHA results. The role of Universities in supporting students' mental health will be discussed; specifically in relation to supporting students' academic success and positive post-secondary experience.

This presentation aligns with the conference sub-theme of Designing Student Experience Supports. This broad view of supporting students will inadvertently address several of the suggested topic areas including academic support services, disability accommodation and supports, cultural minority supports, first generation in higher education supports, part-time and mature students, international students, and engaging racialized students.

11.2 Workshop - Realizing the transformative promise of experiential learning (room 311)

Chair: Bill Hunter (UOIT)

- Sheldene Simola and Louise Fish (Trent)

Purpose and Function of Workshop:

“Experiential learning” has become increasingly popular as a transformative pedagogical approach, with strong potential to facilitate the development of a diverse range of skills and values that are salient for citizenship and leadership at both local and global levels. However, despite its apparently obvious and commonsensical meaning, “experiential learning” is a contested term, in which various underlying philosophies are associated with different experiential methods and hence, different types of anticipated outcomes. Moreover, despite the potential benefits of experiential learning opportunities, various methods can also pose an assortment of ethical, pragmatic and risk management challenges, which sometimes go unacknowledged and therefore unaddressed. Understanding the differences among various experiential methods, being able to select the “best fit” for particular courses and learning goals, and, effectively planning for and managing the challenges inhering each method will help educators and students alike to more fully realize the transformative promise of experiential learning.

The workshop will use guided and interactive discussions and activities. Following completion of the workshop, participants will be able to:

1. Identify five defining characteristics of “experiential learning.”
2. Describe three key (philosophical) approaches to experiential learning (i.e., pragmatist, critical praxis and phenomenological/embodied); within each approach, identify the boundaries that are transcended relative to conventional classroom instruction; and describe the anticipated benefits and limitations of transcending conventional boundaries.
3. Choose the experiential approach of “best fit” for their own discipline/course based on consideration of six questions comprising an experiential learning choices guide.
4. Describe three key ways in which careful planning and preparation can enhance the experiential learning experience for both students and teachers.
5. Demonstrate facility with three specific planning tools that can be used to anticipate and prepare for specific ethical, pragmatic and risk challenges that might arise when using experiential learning activities.
6. Devise, implement and evaluate an effective and sound experiential learning activity that is relevant to one’s specific discipline/course.

11.3 Designing system and institutional change IV (room 312)

Chair: Brian Campbell (UOIT)

- Eileen Quinn and Olivia Edge (ITB), An Approach To Designing Services In a Technological University: Re-Engineering or Seduction?

This paper reviews an approach to organisation design in the area of student-related services in a new type of university in Ireland, a technological university (TU). This university will be created through the merger of three institutions. As envisioned, characteristics of the TU include being agile, flexible and deeply responsive to its stakeholders. This is a challenge. At present, the internal environment is unsupportive of this, in that it is bureaucratic and replete with mechanistic thinking. Furthermore the merger environment is highly ambiguous, uncertain and unpredictable. In this world, change doesn't happen readily – rather, it has be seduced.

The approach reviewed is experimental and gives a nod to the mechanistic, recognising the need for some planning yet leaves considerable scope for the new to emerge. With minimal planning, mini-projects were undertaken by cross-institution teams of 6-8 people. In how these teams were established and operated, the intent was to offer participants an embodied experience of the messiness of change, of what it might be like to be shaken from a comfort zones yet feel empowered to create something new. By embodying such experiences, our assertion is that change moves from being a process-driven re-engineering project towards a people-oriented seduction activity.

- Dan Lang (Toronto), Comparing Quality: The Quality Assurance Enhancement Report for England and Northern Ireland and the Ontario Quality Assurance Framework

This is a comparative study of two reports on the assurance of quality in higher education that appeared contemporaneously in 2008. One was the result of a joint working group of the Quality Assurance Agency for Higher Education, the Higher Education Academy, and the Higher Education Funding Council for England. The other was the result of a task force of the Council of Ontario Universities and the Ontario Council on Graduate Studies. Both groups had the endorsement of government. Both groups began with extensive surveys of institutional opinion about existing quality assurance and enhancement regimes. Using NVivo software, documentary analysis, archival records, **and focus groups** the paper identifies and compares several recurring themes, such as: the boundary line between academic support services and student services, the assurance of quality as separate from the enhancement of quality, balancing homogeneity and isomorphism, the institution versus the basic academic unit as the focus of assurance, self-regulation versus system regulation, the assurance of quality versus the enhancement of quality, and the role of league ranking, performance indicators, and benchmarking, aggregation, and scope of jurisdiction. The paper pays particular attention to the balance between institutional autonomy and system-wide standards in promoting quality and innovation. Some particular findings are that the Ontario perspective focuses on assuring quality in contrast to the British approach's orientation to enhancing quality. The British orientation is towards formative assessment while the Ontario approach is more normative. Neither report discusses the demonstration of quality. Both approaches, then and now, rely on external audits, but the meaning of "audit" is different between the two.

11.4 Online engagement I (room 313)

Chair: Jordanne Christie (Durham)

- **Daniel King (DIT), Management Accounting – Combining Blended Learning and Mobile Apps to Enhance the Flipped Classroom Concept**

The primary purpose of this presentation is to demonstrate how Blended Learning, Mobile Apps, and other technological innovations can be combined with the Flipped Classroom concept to enhance the delivery of a Management Accounting module.

There is no single model for the Flipped Classroom. This particular model uses an “Active Learning” approach. Students receive Management Accounting case studies/problems. The students work individually or in small groups. The individuals/groups can share ideas and help each other.

This Flipped Classroom/Active Learning approach is supported by on-line access to notes via Blackboard. Video tutorials dealing with a range of topics are also available to students via Blackboard along with quizzes and self-test tutorials so that students can monitor their own progress.

The use of Mobile Apps is an additional feature that has been incorporated into the learning process. A range of appropriate Mobile Apps are introduced to students and incorporated into the delivery of the module.

These apps are discussed and evaluated in the context of the Management Accounting module.

Finally, feedback from the students is presented and future opportunities and directions are discussed.

- **Bridgette Atkins and Milly Ryan-Harshman (UOIT), Designing a Fully Online Social Marketing Course for 21st Century Learners**

In 2015, a new online course, Social Marketing for Public Health, was developed for health sciences students at UOIT. The course was intended to help students develop the skills required for planning and delivering social marketing campaigns. The development of this course brought together members of the Faculty of Health Sciences and the Teaching and Learning Centre with individuals from ChangeMakers, a social marketing agency.

Designing authentic learning experiences, providing students – who have wide-ranging technical skills and experience – opportunities to demonstrate their achievement of the course learning outcomes, building in a strong social element to suit the nature of the subject area, and scaffolding student learning in a fully asynchronous environment were four overarching challenges faced by the development team. This paper explores how these challenges were addressed, which learning theories guided the design process, what lessons were learned through the development and facilitation of the course and discusses next steps for future offerings of the course.

- **Todd Blayone, Roland Van Oostveen, Maurice DiGiuseppe, and Wendy Barber (UOIT), and Elizabeth Childs (Royal Roads), Developing Learning Communities in Fully Online Spaces**

Online learning is having profound effects on institutions of higher education. Allen & Seaman (2014) report that in the U.S. in 2013, 33.5% of higher education students took at least one online course. While online courses are highly variable with respect to how they are constructed, ranging from blended learning, where students complete in-class or at-home tasks and assignments using an internet connection, to fully online courses, where students never physically come on campus but interact with each other using a variety of synchronous and asynchronous tools and affordances, they have, perhaps undeservedly developed a reputation of

leaving students feeling isolated, disconnected and frustrated, resulting in retention and persistence issues (Lehman & Conceicao, 2014).

Simultaneous to the rise in demand for access to online learning, an increasing number of calls for a paradigm shift in employment skills are coming from a variety of sources, such as the Conference Board of Canada (2016), eWeek (2015), World Economic Forum (2015) and the Ontario Ministry of Training, Colleges and Universities (2015). All of these sources recommend, among other things, an increased emphasis on skill development in the areas of complex problem solving, critical thinking, creativity and collaboration. According to Miller (2014), these recommendations match a list of best practice principles for online learning including: allowing for group collaboration, promotes active learning, encourages active participation, knowledge construction, learner-centred fostering meaning making discourse and are based on higher level thinking skills of analysis, synthesis and evaluation focusing on real world problem solving.

This paper presents the Fully Online Learning Community Model (Childs, vanOostveen, Flynn & Clarkson, 2015), as developed in the Faculty of Education at the University of Ontario Institute of Technology (UOIT). Along with a problem based learning (PBL) orientation, the FOLC Model serves as the basis for the fully online program, the Bachelor of Arts in Educational Studies and Digital Technologies (ESDT). The model was developed as a modification of the Community of Inquiry model (Garrison, Anderson & Archer, 2000), as a means of reducing transactional distance (Moore, 1993). It also incorporates newcomers into the learning community through the process of legitimate peripheral participation (Lave & Wenger, 1991).

In program courses, instructors, teaching assistants and students collaboratively function as co-creators of the learning environment, the digital space. Instructors begin the PBL process by publishing YouTube videos as modified Problem Based Learning Objects (vanOostveen, Desjardins, Bullock, DiGiuseppe & Robertson, 2010). Students in turn, use the YouTube video to create ill-structured problems. Students bring their thoughts and questions about these problems to the hour long facilitated audio-video conferencing tutorial sessions. Acting initially as facilitators, instructors and teaching assistants model a process of eliciting preconceived notions about the problems from the students and offering challenges to the conceptions (Bencze, 2008), gradually empowering control of these interactions to the students as they collaboratively investigate the problems and build toward solutions.

This presentation argues that a learning community can be established in fully online programs and that these communities can have a democratizing effect on the participants. These communities have characteristics that are described in the South East quadrant of the Teaching-Learning Paradigm Model (Coomey & Stephenson, 2001). A variety of evidence drawn from a number of ongoing research projects will be shared during this session.

11:45 a.m. to 12:30 p.m. - Lunch

Lower Level

12:30 to 2 p.m. - Sessions

12.1 Student success II (room 311)

Chair: Tessa Troughton (UOIT)

- **Alyson King (UOIT), Student Voices: What students say they do to be successful**

Since a post-secondary education tends to lead to improved life chances and opportunities, understanding the ways in which students at all levels of university are able to succeed is important not only for individuals, but also for the nation. In spite of the success of targeted first-year retention programs, most universities in Ontario have much lower degree completion rates. Few existing studies of university persistence and success focus on what students themselves say about how and why they are successful at persisting to graduation. This pilot study compared the strategies for success at university used by self-identified visible minority students and those who did not self-identify as a visible minority. The findings demonstrate that further research is needed to better understand how students who face significant barriers are able to successfully persist to fourth year and graduation. Initial findings illustrate the importance of strong foundations of having good time management, being well-organized, and being motivated to engage in course work. When students embrace these foundational strategies, then more nuanced strategies can be implemented.

- **Geraldine Gray, Colm McGuinness, and Philip Owende (ITB), Learner Analytics to Inform Teaching and Learning Approaches**

Learning analytics is an evolving discipline with capability for educational data analysis to enable better understanding of learning processes. This paper reports on learning analytics research at Institute of Technology Blanchardstown, Ireland, that indicated measureable factors can identify first year students at risk of failing based on data available prior to commencement of first year of study. The study was conducted over three years, 2010 to 2012, on a student population from a range of academic disciplines (n=1,207). Data was gathered from both student enrolment data, maintained by college administration, and an online, self-reporting tool administered during induction sessions for students enrolling into the first year of study.

Factors considered included prior academic performance, personality, motivation, self regulation, learning approaches, learner modality, age and gender. A k -NN classification model trained on data from the 2010 and 2011 student cohort, and tested on data from the 2012 student cohort correctly identified 74% of students at risk of failing.

Some factors predictive of at-risk students are malleable, and relate to an effective learning disposition; specifically factors relating to self-regulation and motivation. This paper discusses potential benefits of measurement of learner disposition.

- **Naoise Webb, Damien Cox and Aiden Carthy (ITB), You've got a friend in me: The effects of peer mentoring**

Background: Peer mentoring refers to a supportive mentorship involving an exchange of knowledge or experience between the mentor and the mentee. This schema provides guidance through knowledge transfer and develops communication and leadership skills. A number of studies have found that peer mentoring can be beneficial to first year students both socially and academically (Andrews and Clark 2011; Fox, Stevenson, Connelly, Duff and Dunlop 2010; Topping and Ehly 2001). For example, research has demonstrated that the provision of peer mentoring to first year undergraduate students can lead to increased levels of academic attainment and decreased levels of attrition (Carthy and Slattery 2015). Specifically, research evidence supports the assertion that a key advantage of the provision of peer mentoring is that it promotes a sense of social belonging for students. It is suggested that this may positively impact academic performance and help decrease attrition rates (Kelly 2001; Kingston 2008; Roberts, Clifton and Etcheverry 2001).

Aims: The current study aims to explore the effects of peer mentoring on levels of attrition and academic attainment in first year students attending an Irish technical college.

Analysis: This experimental study used a structured self-report questionnaire to collect data from participants. The study involved a sample of first year students (N=151) from 4 subject backgrounds, Horticulture, Business, Engineering and Computing. Participants were assigned to student mentors from senior cycles in the college. A questionnaire was completed at the culmination of the programme and the replies analysed to investigate the profile of students, the reported levels of anxiety and difficulty settling in and their appreciation of the mentoring programme. Notable results include lower levels of anxiety reported by younger, male and STEM students (particularly engineering, despite its high attrition rate) and a lack of impact of family on levels of anxiety. Participants also report high levels of satisfaction with the mentoring programme. Two key academic variables, attrition and GPA, are compared between independent samples from 3 groups of the current peer mentoring year and the previous year without peer mentoring programme, by means of a test for independence and an ANOVA respectively. Another comparison was conducted with GPA and attrition rates for one group receiving peer mentoring and a similar collegiate peer group not attending the programme. Results are discussed to disseminate the strengths and methodological limitations of the study, and practical recommendations for peer mentoring within Irish colleges.

12.2 Narrative and audience (room 312)

Chair: Pat O'Connor (ITB)

- **George Gadanidis (Western), Mathematics Teacher Education Curriculum as Research-Creation**

This paper takes up the term research-creation used by the Social Sciences and Humanities Research Council of Canada (SSHRC) and considers how research-creation might be used in curriculum development for mathematics teacher education, where "(t)he creation process is situated within the research activity and produces critically informed work in a variety of media (art forms)" (SSHRC, 2016, n.p.). SSHRC cautions that "Research-creation cannot be limited to the interpretation or analysis of a creator's work, conventional works of technological development, or work that focuses on the creation of curricula." While simply creating curricula is not research-creation, combining research-creation artefacts produced in a variety of art forms to create curricula may be.

- **Lavinia McLean and Emmett Tuite (ITB), Storytelling in education: Exploring the value**

Storytelling has been described as one of the first methods people utilized to teach others. In education today the use of storytelling as a teaching strategy can be related to its ability to offer a platform that is engaging, an innovative way to assess students learning and an effective way to explore different meanings of experiences (Gaydos, 2005; Stevenson, 2005). The present research was designed to explore the use of formal and informal stories, in an education setting. Questionnaires were administered to students, to explore the benefits and obstacles to formal and informal storytelling in the classroom and in online learning. This research builds on previous research suggesting the benefits of storytelling in both social care practice and education, and its effectiveness in the development of relationships and to develop shared meanings (McLean & Tuite, 2014).

The main themes that emerged from the data relate to the effective use of stories in education to develop student's abilities to be reflective, innovative and to explore alternatives in their practice. Students also highlighted particular types of stories that extended their learning and the

obstacles they felt were significant in the use of effective storytelling. This teaching strategy appears to be of particular relevance to practice based courses and modules. Challenges to using the approach are also highlighted, in both online and traditional classroom settings. Future research and implications of the research for developing storytelling within one's own teaching and curriculum are discussed.

- **Harry Browne (DIT) and Gessica De Angelis (Trinity), The Multilingual Times: Breaking the language barrier between journalism and science**

This paper recounts and reflects upon the first two years of a project of transdisciplinary ICT based collaboration involving a group of students studying journalism at Dublin Institute of Technology, who are paired one to one with a group studying linguistics and applied linguistics at Trinity College Dublin. Taking as its starting point the idea that most journalism urgently needs to improve the accuracy and depth of its science coverage, and the equally urgent idea that scientists need to improve their capacity to communicate clearly to a wide public, the project has seen the students working together to produce an accessibly written blog, The Multilingual Times, reporting on the latest peer reviewed research in the field of multilingualism. By using a series of Google Drive folders and files to host the collaborative work, the instructors (the paper's coauthors) are able to monitor students' progress, address issues as they arise, and assess the contributions of each student to the finished blogposts. The project is therefore, in addition to its other pedagogical facets, something of an experiment in using Google Apps and its online synchronous and asynchronous capacities to facilitate collaboration.

12.3 Online engagement II (room 313)

Chair: Jennifer Percival (UOIT)

- **Wendy Barber and Lorayne Robertson (UOIT), Developing Critical and Reflective Online Communities by Empowering Student Voice**

The purpose of this qualitative case study is to examine the voices and learning experiences of students in online synchronous graduate courses. Through students' digital artifacts and narrative inquiry, the authors examine the role that student voice plays in developing authentic online communities. The authors argue that transformational digital learning views student voices as central to the process of learning in community, not extraneous to it. In traditional teacher-centred digital pedagogy, students may feel disconnected or isolated through modes of distance learning that focus on individual engagement with the content rather than with peers. In order for students to participate in a more holistic sense in their learning, the learning experience should help them join into an adult learning community and feel that they belong, and have a voice in creating that community. In sum, students must be more than consumers of knowledge and technology; the courses must be designed to allow constructivist opportunities for students to contextualize and integrate knowledge as well. With the wide variety and increasing landscape of new and innovative digital means of expressing concepts, placing students at the centre of the process is a digital affordance that holds the potential to engage students more fully.

The authors detail an analysis of students' digital artifacts created during two 12-week graduate courses entitled "Critical and Reflective Practice in Education". Each course was delivered through synchronous weekly Adobe Connect sessions. These artifacts or "Digital Moments" are used as evidence of the quality of the students' learning experiences, and a cognitive map of their challenges and successes. This enables the instructors to create more authentic online learning environments. The authors discuss how new pedagogical approaches are necessary to

move beyond teacher-centred learning and meet the needs of students in an increasingly complex digital world. More specifically, they examine the effect of these strategies through the eyes of students by analyzing the themes that emerge from the narratives. In sum, students express powerful voices about their individual experiences. This paper articulates the process of developing a critically reflective online learning space, and examines how teachers can successfully chronicle students' voices and experiences through their digitally created artifacts.

- **Jordanne Christie (Durham), Educational Development for Online Teaching**

This paper discusses a case study that explores the impact on educators' teaching practices, particularly their assumptions and beliefs about teaching and self-efficacy, as a result of their participation in an educational development programme designed to prepare college educators to develop and teach online and hybrid courses. The data were collected through an online survey of 34 participants, face-to-face interviews with 18 participants and documentary evidence review of 6 participants, and was analysed using Braun and Clarke's (2006) thematic analysis approach. The findings suggest that the knowledge and experience that college educators acquire when participating in educational development for online teaching can produce a positive increase in technological and pedagogical knowledge and understanding of accessibility. This new understanding, in turn, can result in changes to both online and face-to-face teaching practices of educators. The results also indicate that for some educators, participation in an educational development programme for online teaching encouraged more student-centred teaching approaches and helped to dispel misconceptions about the lower quality and value of online learning. Participation in educational development for online teaching was also found to increase some educators' technical and pedagogical confidence, although a few participants experienced an initial decline in self-efficacy.

- **Claire McAvinia (DIT), How can online learning be used more effectively in higher education in the 21st Century?**

Recent literature, discussion in social media, and even mainstream media, suggests that new technologies are having little positive impact on education. In spite of the rapid evolution of new technologies, and hopes that they would „transform“ teaching and learning, this discourse suggests that learning technologies are fundamentally under-exploited, particularly in higher education. New systems, platforms, or delivery models that could better support lecturers and students are welcomed with high degrees of excitement, followed by disappointment when they fail to deliver the changes anticipated. This paper addresses these issues through an investigation of the literature, and through research into the adoption of online learning in higher education. The analysis is undertaken using Activity Theory applied to two cases: the virtual learning environment (VLE) / learning management system (LMS), and the massive open online course (MOOC). The analysis presented will show that there have been sometimes contradictory missions, and even technologically deterministic approaches, to the use of e-learning in higher education. The analysis underpins a series of recommendations for those engaged in designing higher education for the 21st century. Using some of the lessons we can learn from existing mainstreamed technologies, we may be able to break the cycle of hype followed by disappointment and potentially resolve some of the challenges confronting higher education practitioners today.

2 to 2:30 p.m. - Break

2:30 to 4 p.m. - Sessions

13.1 Workshop - Education and training in technological universities – an experiential discussion (room 311)

Chair: Roland Van Oostveen (UOIT)

- Cormac Doran (ITB)

The next significant step in the evolution of Higher Education in Ireland will see the merger of 3 Institutes of Technology into one entity leading to designation as a Technological University and a golden opportunity to forge a distinct identity within the sector. Since the formation of the initial Regional Technical Colleges in the 1970's, the merging of the Dublin Colleges to become DIT and the subsequent designation of RTC's to Institutes of Technology in the late 1990's, the role of programmes within the Institutes has been constantly changing.

Due to legislative requirements in many sectors, academic qualifications are now obtained with professional endorsements from state registration bodies and act as the basic requirement for entry to industry. Often lecturers on these programmes must also be a registered practitioner with a professionally endorsed qualification thereby limiting the range of those that can deliver programmes. The predetermined requirements for professional endorsement can influence the design of courses to ensure that they match what is required from the state registration body. This questions the role of these programmes as well as the identity of the Institutes, Academics and the Student.

This discursive workshop will explore roles and identities within the Technological University in relation to training and education. Where educating students may be understood as providing a theoretical knowledge base, training them could be interpreted as developing skills to be applied in the workplace.

13.2 Workshop - Engagement and activity: active learning about active learning (room 312)

Chair: Hugh McCabe (ITB)

- Bill Hunter (UOIT) and Claire McAvinia (DIT)

Function and Purpose:

New technologies in tertiary education may serve a variety of purposes including increased course participation (e.g., by enabling study at a distance or by applying principles of universal design) and pedagogical change (e.g., to implement active learning methodologies). The extensive research on the effects of online or mobile education has been the focus of meta-analytic studies by Schmid et al. (2014), Means, Toyama, Murphy & Baki (2013) and others. Hunter has recently reviewed research on a variety of methods of active learning with a focus on practical applications, including technology-supported applications, in tertiary classrooms. McAvinia's research has focused on the adoption of new technologies at institutional levels.

Our objectives for this workshop are that participants will be able to:

1. Reflect critically on their expectations from technology in their teaching and consider whether these expectations have been met;
2. Examine affordances of particular technologies and how their professional practice/decisions with technology match these affordances;

3. Participate in a range of activities to enable them try active learning methods supported by resources developed specifically for this workshop;
4. Set goals and actions to take away from the workshop.

13.3 Workshop - Canada-Ireland collaboration design workshop (room 313)

Chair: Thomas Stone (ITT)

- Scott Clerk (UOIT), Larissa Strong (Durham), and Mairead Murphy (ITB)

The HEIT conference brings together academics and practitioners from six organizing institutions (amongst others) to address the theme of Designing Education in the 21st Century. An important '21st Century' challenge for educators is to incorporate an international dimension into their programs and their work. The conference itself is an excellent example of international collaboration – and is also the ideal venue to identify, discuss, and plan new collaborations between Canadian and Irish partners. Several of the International Offices of the organizing partners propose this workshop which will challenge participants to work with their transatlantic counterparts to design specific, practical collaborations between institutions.

The workshop will begin with a presentation, including: an overview of existing collaborations between institutions, an overview of collaboration modalities (student exchanges, research visits, joint on-line activities, collaborative degree/diploma programs, etc.) a walk-through of the workshop methodology, and discussion of the challenges that International Offices face in developing these collaborations. The workshop participants will then break into groups based on academic groupings (e.g. Social Sciences, Engineering, etc.) and/or modalities of interest (e.g. student mobility, faculty mobility, collaboration on-line). Each group will have a facilitator from an International Office and there will also be resource people available for troubleshooting. Groups are expected to delve into the specifics of international collaboration, and results should include operable proposals, such as: specific student exchanges (including course mappings between institutions), student research exchanges, internship swaps, a specific on-line activity, a 2+2 dual degree, etc. Groups will report back to the participant group with their suggested collaborations, and the participating International Offices will then begin work to concrete the proposals in the weeks and months after the conference.

4 to 4:30pm - Break

4:30 to 5:30 p.m.

14.0 Plenary - The future of HEIT (room 210-213)

7 p.m. - Hockey Night in Oshawa

Tribute Communities Centre

99 Athol Street