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Teaching and Learning Centres: Their Evolving Role Within Ontario Colleges and Universities

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Introduction

One of the primary functions of many Ontario universities and colleges is to provide students with a high quality teaching and learning experience. However, as resources are stretched and postsecondary institutions focus more on research, funding into teaching development and support has been put at risk. A number of additional challenges – including rising student/faculty ratios and class sizes, an aging faculty population, outdated methods of instruction and curriculum design, and uneven access to teaching development for new instructors – are making it even more difficult to develop and maintain quality teaching. Many student associations, faculty and administrators, the general public, as well as provincial government officials have agreed that the quality of the teaching and learning experience available to students at Ontario's colleges and universities is increasingly at risk.

Just as the roles and goals of postsecondary institutions have changed over the past few decades, so have the operations and priorities of their teaching and learning centres. These centres first emerged in Canada during the late 1960s and early 1970s, accompanying the rise of student activism and the demand for higher quality teaching. Through teaching and learning centres, institutions hoped to consolidate, expand, and promote professional development programs for college and university faculty, and increasingly for graduate and undergraduate teaching assistants. Most Ontario universities and colleges now have teaching and learning centres; in fact, during the past year alone, five universities and several colleges joined the growing list of Ontario postsecondary institutions that have launched, enhanced, or reorganized their teaching and learning centres and services (Miles & Polovina-Vukovic, forthcoming).

On March 30, 2011, the Higher Education Quality Council of Ontario (HEQCO) hosted a one-day workshop attended by several dozen invited experts from Ontario postsecondary institutions to explore the continuing evolution of – and the challenges and opportunities facing – college and university teaching and learning centres.

This paper is intended for members of the Scholarship of Teaching and Learning (SoTL) community, college and university faculty and administrators, government officials, students, and concerned parents, along with other postsecondary stakeholders. The objective is to summarize and expand upon the presentations and discussions that took place at HEQCO's workshop in order to provide a background and context for the evolving role and impact of teaching and learning centres within Ontario postsecondary institutions, and to suggest options and opportunities for future practice. This report is divided into five sections: following this brief introduction, the first section provides a background portrait of the context for teaching and learning centres and educational development in Ontario's postsecondary sector. The following three sections reflect the discussions that took place at the HEQCO workshop, and are divided into the same three broad themes that animated the discussions there:

1. Responsibilities, Pressures, and Strategies
2. Assessing Impact
3. New Ideas

The concluding section provides some suggestions and recommendations in regards to what needs to be done "Going Forward" when it comes to Ontario's expanding network of college and university teaching and learning centres, and the growing emphasis on teaching and learning quality in the province's postsecondary sector.

The Ontario Context

More than a decade ago, many postsecondary institutions and faculty across Canada – encouraged by substantial increases in federal and provincial funding – began to shift towards an increased focus on research and innovation activity. Most postsecondary institutions created or expanded offices to facilitate and support the success of faculty researchers. Many Ontario universities expanded their graduate programs and created more research chairs, while teaching loads declined as tenured faculty increasingly sought to be released from the "burden" of undergraduate teaching in favour of increased research. Within the college sector some Ontario institutions sought polytechnic status and an enhancement of their applied research activities, and more faculty were hired with PhDs and an enhanced interest in research. At the same time an increase in student enrolment and a higher level of accountability has seen an increase in faculty teaching assignments and workloads.

Even with the recent focus on the research and innovation mission of postsecondary institutions, teaching and learning remained a priority at many institutions. The University of Michigan created North America's first centre for teaching and learning in 1962, a voluntary unit that relied largely on a network of motivated professors to transmit interests and ideas. In 1969, McGill opened one of the first Canadian teaching and learning centres, with several more universities following in the 1970s. In 1973 the Ontario Universities Programme for Instructional Development (OUPID) was created to help coordinate efforts at the provincial level; though controversial during its brief existence, it helped to legitimize the notion of educational development in Ontario (Scarfe, 2004). By the late 1970s, a Professional and Organizational Development (POD) Network was formed for educational developers across North America, and dozens of U.S. universities opened teaching centres, though they continued to vary immensely in terms of their quality and resources (Brint, 2009). In 1977, the National Council for Staff, Program, and Organizational Development was created with a mandate to provide faculty, staff, and organizational development practitioners within the U.S. college sector – and increasingly, in Canada as well – with an opportunity to develop as practitioners by sharing information and experiences.

The Society for Teaching and Learning in Higher Education (STLHE) was developed formally in Canada in 1981 by educational developers and faculty interested in the support of teaching and learning (STLHE Constitution). Subsequent expansion of the Society and of the number of teaching and learning centres led to the establishment of a constituency of educational developers, the national Educational Developers Caucus (EDC) within STLHE. The desire to foster communication and collaboration among the growing number of teaching and learning centres in Ontario colleges and universities also led to creation of the Council of Ontario Educational Developers (COED) in 2008. Throughout the past decade most Ontario colleges also greatly expanded the resources available for faculty and professional development.

Recently, calls for a renewed focus on teaching and learning quality have come from many quarters, including students, faculty, college and university administrators, and governments, and not only in Canada. Since 1997, all universities in the United Kingdom are required to have teaching development for new faculty (Gosling, 2009). Until the recent financial crisis prompted huge reductions in postsecondary funding, the British government also funded a series of National Teaching Fellowships and projects, as well as a separate Fund for the Development of Teaching and Learning. Similarly, Australia's Learning and Teaching Council provided substantial funding support for a mixture of program grants and fellowships for educational leaders, while also promoting a Teaching Quality Indicators project.

To some extent the Ontario government has followed suit. The 2003 budget created a "Quality Assurance Fund" that provided a separate envelope of funding to increase the quality of postsecondary education for students. Under *Reaching Higher*, this became a "Quality Improvement Fund" investing as much as $200M each year to allow colleges and universities to hire more support staff and faculty, improve student support services, and purchase educational resources to provide training with updated technology. Also introduced in 2006-07 were the short-lived Leadership in Faculty Teaching (LIFT) awards, which provided up to 100 awards of $20,000 to college and university faculty in recognition of quality in teaching. As recently as May 2011, Ontario's former Minister of Training, Colleges, and Universities, the Honourable John Milloy, spoke about *Putting Students First* and noted that

> students deserve a classroom experience that engages and challenges them in a way that gives them the needed skills for the new economy. One of the goals of the new strategy is to work with students, faculty and our institutions to identify and measure the essential elements of teaching excellence and see it improved across the board (Milloy, 2011).

While many of the early efforts to target provincial funding towards improving the quality of students' experience have now been combined within the basic operating grant, HEQCO continues to support research and promote a variety of strategies intended to improve the quality of teaching and learning. To this end, HEQCO hosted a research symposium in 2008, followed by the release of an edited collection of related articles intended to "identify and synthesize what is already known about teaching practice and student approaches to learning in higher education, what we still need to know, and the implications of what is known for improving the quality of education" (Christensen Hughes & Mighty, 2010). Since then, HEQCO has partnered with centres for teaching and learning, as well as college and university faculty and staff, to undertake a series of assessments of innovative and promising practices underway at Ontario colleges and universities in the areas of student services (17 projects launched in 2008) and teaching and learning (13 projects launched in 2010 on various themes, and 28 in 2011 exploring practices in the teaching of large classes, the use of technology-enhanced learning, and apprenticeship completion).

The private sector has also shown interest in and concern for teaching and learning quality. A recent TD Bank report suggested that the quality of teaching in postsecondary institutions will be a key determinant of productivity growth in Ontario (TD Economics). 3M Canada has collaborated with the STLHE for more than 25 years by funding the annual 3M National Teaching Fellowships, which recognize university faculty who demonstrate excellence in teaching and commitment to the improvement of teaching beyond their own classes. More than a decade ago, the STLHE also created the Alan Blizzard Award – funded by McGraw-Hill – to recognize exemplary collaborative innovations in postsecondary teaching.

The impetus for change and new investment has also come from within Ontario's postsecondary sector. Student associations like the Ontario Undergraduate Student Alliance (OUSA) have supported efforts "to embrace innovative teaching methods and to champion new programs based on inquiry learning, community service learning, and problem-based learning" (OUSA, 2011). They have also called for the establishment of teaching fellows and improved professional development for new faculty. Faculty members themselves have fought at some institutions for the option of teaching-stream appointments (Vajoczki, Fenton, & Menard, 2011).

Some colleges and universities have responded to these calls to recognize and emphasize teaching and learning quality by increasing the size and funding of their teaching and learning centres. Other postsecondary institutions that did not already have teaching and learning

centres have developed new ones. By the fall of 2011 it was estimated that most of the 24 Ontario colleges and all 20 universities had such centres in place, with many launched in the past few years. Teaching and learning centres have clearly emerged as the focus of new efforts in this important area of postsecondary education. As noted in the concluding chapter of *Taking Stock*:

> [E]ducational developers or teaching centres may have a particularly essential role to play – both directly and indirectly through their support of faculty champions – in helping bring about pedagogical innovation. New-faculty orientation programs, learning groups, courses, workshops, conferences, private consultations, curricular mapping and design exercises, and support for the scholarship of teaching and learning are all important services. (Christensen Hughes & Mighty, 2010)

Responsibilities, Pressures, and Strategies

Educational development in Canada has been in transition for over three decades, as teaching and learning centre staff transformed from being primarily developers and deliverers of workshops to multifaceted resources offering an array of services, programs, and expertise to faculty. During the March 30 workshop at HEQCO, the following themes emerged regarding the responsibilities and pressures faced by teaching and learning centres today, as well as the strategies educational developers have found helpful in response.

Promoting Teaching and Learning Centres

Most centres now offer a wide range of information, consultations, workshops, coaching and professional development programs to faculty, graduate and undergraduate teaching assistants, and sessional and part-time instructors (Gosling, 2009). In the college sector, an increasing number of lab and clinical technologists who work directly with students are also taking advantage of development opportunities to enhance student learning. This has been accompanied by an increased pressure to provide quality services even as available institutional funding has often declined. In some cases, teaching and learning centres have faced budget cuts beyond those faced by other departments and functions, despite growing demands for the services they provide. Thus, many centres have found themselves forced to turn down requests from faculty members, administrators, and other members of their campus communities due to lack of resources, or they find themselves with an increased workload that is unsustainable.

Maintaining core services depends on institutional funding, the centre's mandate, and its relation to the institution's overall strategic plan and priorities. Besides funding, a centre's position in its campus decision-making process may have the most significant impact on whether it is able to maintain its level of services. Centres that are empowered to provide institutional input on and/or influence new policies and practices have the opportunity to speak out regarding their capacity to support and promote those new policies. When centres are not involved in decision-making processes, they may not be able to adequately support newly enacted policies, which may lead some to perceive them as being unhelpful. Significant institutional changes – such as sweeping budget cuts – can be just as disruptive.

Admittedly, there are ways to circumvent structural limitations and influence institutional culture by, for instance, regularly taking deans out to lunch, attending campus social events, and routinely talking about and promoting teaching and learning. Maintaining regular day-to-day contact with faculty members who are active in decision-making bodies can also enable centres

to indirectly influence priorities at the departmental, faculty, and institutional levels. Such contact also makes it easier to get a realistic sense of what services faculty actually want, lobby for resources for new programs, and create more advocates willing to promote the centre's services. Of course, centres that are adequately staffed and funded are better able to take advantage of this potential, as they are more apt to have the time and resources for networking.

In some institutions, technology may be driving changes in educational development, despite findings that faculty members and students generally would prefer more face-to-face contact as opposed to webinars, online courses, and other technological forums. Educational developers should advocate for or against online education based on whether it will enhance teaching and learning, as opposed to whether it is simply desired or preferred. If technology is driving the services provided by teaching and learning centres, this is a problem that should be addressed. Of course, the same applies to face-to-face offerings. A good face-to-face course in teaching and learning can be helpful, but much depends on how it is taught, its format, and its learning objectives. In either case, cultural change is likely to depend on the degree to which the learning experience is social and relevant, and involves making powerful connections with people and ideas.

Some educational developers would like to receive even more requests from both administrators and part-time instructors. Others may be at the limits of what they can provide given prevailing conditions and resources. Ideally, of course, all educational developers would like the opportunity to say "yes" more frequently. Yet there is the risk that, by doing well, a centre will need to say "no" more often, as funding is unlikely to grow in proportion with a centre's success. When possible, acquiescence to administrative requests should be conditional on the provision of additional resources.

Capacity-building

We use capacity-building to refer to efforts that empower faculty members, administrators, sessional instructors, and other members of campus communities to address teaching and learning problems either independently, or in collaboration with others. Capacity is an issue, in part, because most faculty members are amateur teachers. Some may even consider themselves apprentice teachers, learning from other professors with more experience, but in reality this often means amateurs learning from other amateurs with little support and reliable information.

Empowering the broader community to properly address teaching and learning challenges requires that a significant proportion of faculty and other members of the community invest in deepening their understanding of teaching and learning, further enhancing their own leadership skills. The majority of faculty, however, are unlikely to invest significant time in their own teaching development (or that of others) unless they become motivated to do so. Such motivation will depend on changes in institutional and academic cultures and reward systems (especially at the university level), and on the demonstrated value and effectiveness of teaching centres (Britnell, Brockerhoff-Macdonald, Carter, et al., 2010).

Colleges, to a greater extent than universities, expect their faculty to be teaching professionals rather than researchers who also teach as part of their employment. The Ontario Colleges Quality Assurance Services states that effective teaching goes beyond technical competence. It requires a commitment to, and professional pride in, continued professional development, and behaviours which promote student learning. College teaching staff develop strategies to promote this.

These strategies include participating in reflective practice and undergoing initial and continuing professional development designed to enhance teaching skills and ensure quality. Clearly, there is a high expectation in the college sector for faculty to develop, maintain, and expand their expertise. If this is so, teaching and learning centres at colleges may face less of an obstacle in their capacity-building efforts than their counterparts in universities.

Community-building

It is often suggested that if educational developers can create a critical mass of faculty with a shared interest in teaching and learning, these individuals will provide mutual support and sustainability when the educational developer is required to work on other projects. Forming such a broad community builds capacity and creates linked groups of people with a shared interest in teaching and learning. Collaborations within and between academic departments, as well as networking with other campus services and learning communities, are all ways to build community. Ontario colleges are particularly effective in this regard, actively collaborating (especially through the Western, Eastern and Central Region Colleges) on a number of programs and projects that allow the individual centres to combine resources and offer richer programmes and broader learning communities among faculty at various colleges.

Capacity-building and community-building can both be fostered by reframing expectations so that centres take on only a part of the challenge, encouraging faculty members and others in the campus community to take responsibility for the rest. Thus, new initiatives would become less burdensome for centres and instead become richer social learning opportunities, creating community projects where faculty share, reflect on, and learn about teaching and learning issues with peers. In turn, institutions must empower educational developers to adopt this approach by ensuring that the needed resources and positions are in place to motivate and support faculty participation in longer-term collaborations and to establish sustainable initiatives. Institutions could also adapt models that recognize faculty participation in such initiatives: the 3M National Teaching Fellowships provide a unique model of recognition for faculty who engage in such educational leadership, while the Alan Blizzard Award recognizes faculty collaboration to enhance student learning. Many Ontario colleges and universities also have institutional faculty recognition awards that are peer-mentored.

Educational developers should also consider the advantages of creating communities beyond their own campuses. Pooling resources with other institutions in their region, or across the province, may help a centre expand the scope of its offerings, which can allow centres to accommodate more requests, enhance their available services and resources, and introduce new opportunities for collaboration. There is also tremendous potential in Ontario for more collaboration between universities and colleges on teaching matters of mutual interest. The HEQCO workshop provided an excellent opportunity to expand opportunities and enhance collaboration among the teaching and learning centres in colleges and universities, and recently launched initiatives such as HEQCO's "Tuning" project (in November 2011, HEQCO launched an initiative involving teams of expert faculty from Ontario's colleges and universities that will identify and measure learning outcomes in three discipline "sectors:" social sciences, physical sciences, and life and health sciences), reflect the potential for collaboration across both sectors when it comes to learning outcomes.

Assessing Impact

Centres for teaching and learning have played a role in supporting the enhancement of teaching in higher education for several decades, but recently there has been increasing pressure to assess the impact of what they do (Gibbs & Coffey, 2004). This increased interest in

assessment requires reflection on purposes, practices, outcomes, and intervening variables. Further, it requires exploring the barriers preventing effective assessment in order to chart the future steps that will lead to more strategic and deeper measures of impact. The entire effort is critical for the overall enhancement of quality teaching and learning as modelled by a reflective institution (Biggs, 2001).

Purpose of Assessment

The purpose of assessing teaching and learning initiatives can be divided into two major categories: formative (developmental) and summative (evaluative). Assessment for formative reasons can be used to enhance existing programs, or to gather information required to develop new programs. Assessing programs can also be conducted for summative reasons, to inform decisions about resource allocation, for quality assurance mandated by internal and external bodies, and as justification for the existence of specific programs or the centre itself. Additionally, summative results can be used to support internal marketing and recruitment, and externally to recruit graduate students and faculty to an institution. An increasing number of educational developers are also beginning to engage in a third category: research for knowledge discovery at the level of higher education. It is important to note, however, that assessment on its own is not sufficient. Fundamentally, for assessment to be worthwhile, the data collected must be carefully analyzed and deliberately used to improve practice.

One method to increase the value of assessment is to embed the following primary principles (adapted from Plank and Halish, 2010), which capture the most significant themes that emerged during the March 30 workshop:

1. Assess what matters
2. Connect with institutional and centre goals
3. Develop a cohesive system to collect data
4. Imbed assessment into regular practice
5. Collaborate strategically
6. Plan for and use the results

Great effort can be spent on assessment, and all of it will be wasted unless careful consideration is given at the beginning to determine what really matters. Part of the answer may be to assess elements that connect with the goals of the centre and of the institution, and to consider the high level vision for education. Unfortunately, very few centres have good systems to collect data even once the goals have been determined. A coherent system, in which all of the data are integrated, would allow data to be compared and analyzed more accurately, and used with less effort. Part of the scholarly practice educational developers are expected to model includes intentionally gathering data and reflecting on practice, which means that assessment should be embedded in the regular activities of a centre. Once this happens, it becomes incorporated into regular work and time allocation, which may also increase efficiency.

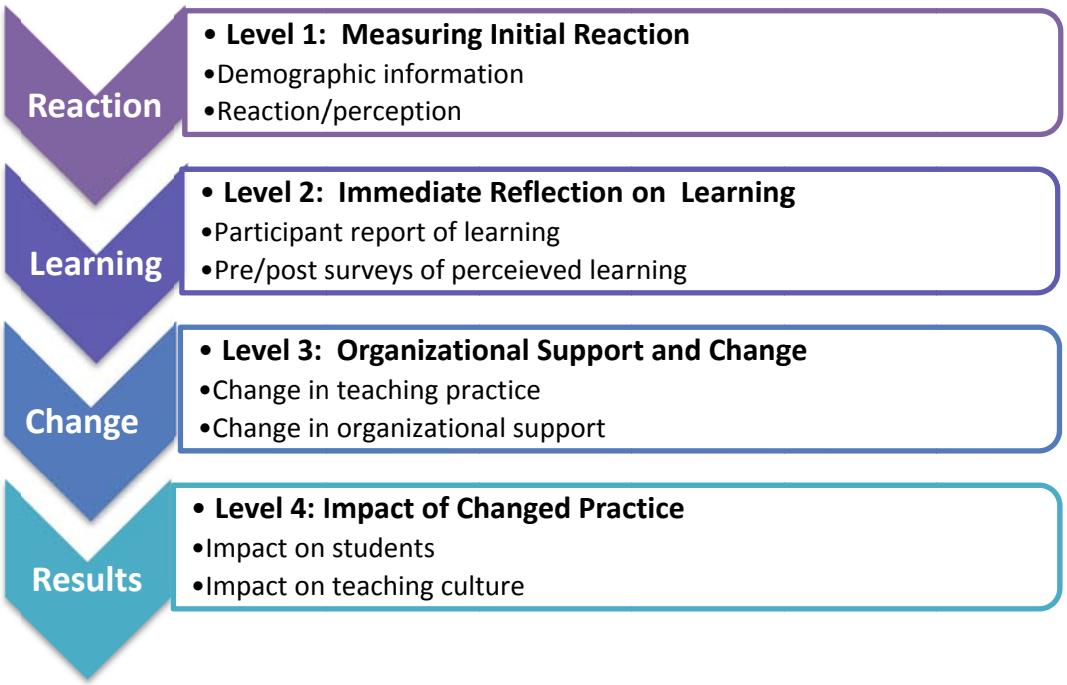
Strategic collaboration will allow information to be gathered from multiple perspectives: faculty, students, across departments, between colleges and universities, and from international colleagues. Collaboration between units would allow centres to benefit from the expertise in data collection found in areas such as institutional research and analysis, human resources, and faculty research. Finally, when collaboration occurs within and across units, people are more likely to be invested in the results. This leads to the final principle: we must plan for and use the results.

Assessment Methods

Teaching and learning initiatives are currently assessed quantitatively (e.g. numerical surveys, demographics) and qualitatively (e.g. interviews, focus groups, case studies). Historically, the evaluation of teaching and learning initiatives have not always been systematic or comprehensive enough to fully assess any impact on beliefs, actions, and culture; evaluation has often stopped at participant satisfaction (Frielick & McLachlan-Smith, 1999). For example, in 2007, Doug Hamilton found that specific events such as workshops were most commonly assessed, while other programs and initiatives were reportedly assessed by fewer than 50 per cent of the centres (Wilson & Ens, 2010). Most of the assessment practices used were at the level of participant satisfaction surveys, and in 2008 Margaret Wilson found a similar pattern (Wilson & Ens, 2010). Consequently, very few centres assess impact on actual teaching behaviours or student learning, nor do they assess long term changes to campus teaching and learning cultures. Given that the goals of most centres are to bring about change at these levels, the fundamental principle of assessing what matters are rarely being met.

The educational development community is moving to address the need to assess at multiple levels. Models of assessment from Kirkpatrick (1996) and Guskey (2002) have been adapted by Peter Wolf (Wolf, Hill, & Evers, 2006), in the context of curriculum development, and Margaret Wilson, in the context of strategic and deeper assessment of all teaching and learning initiatives (Wilson & Ens, 2010). These models are particularly useful because they encourage assessment beyond participant reaction or satisfaction surveys. Combined, they suggest the possible timelines for assessment, and the methods that may be appropriate for centres designing a systematic approach to assessing the impact of their programs (Figure 1).

Figure 1: Assessment Model
(Adapted from Kirkpatrick (1996) and Guskey (2002), Wilson and Ens (2010) and Wolf, Hill, & Evers (2006)



Various methods for assessing initiatives were identified by educational developers at the HEQCO workshop (Appendix 1). A series of questions derived from the combined Kirkpatrick (1996) and Guskey (2002) model can also provide additional options (Appendix 2; Wilson & Ens, 2010).

The time period for assessment clearly is an important issue. Durations extended from immediate assessment, to annual assessment, and less commonly include retrospective assessment of data over a longer period of three to five years. Educational developers also noted that cyclically assessing programs is potentially highly effective, so that not every program is assessed all the time. This could include external and internal review, in which the design, justification, documents, and participant impact are evaluated as a set. This data could then be used in conjunction with international benchmarks or standards for ongoing program enhancement. The cycle would then repeat every one to two years in order to implement the changes resulting from the assessment and to ensure continual enhancement.

Assessment Challenges

Most educational developers agree that increased assessment would be helpful. Assessment is part of engaging in scholarly practice as educational developers, and modeling scholarly practice for teachers, in addition to the formative and summative purposes identified. So, why are centres not fully engaging in assessment? While educational developers identify many possible methods, most centres engage primarily in level one assessment, measuring initial reaction through satisfaction surveys. This gap between belief and action is likely due to three main barriers:

1. Lack of knowledge and skill
2. Lack of resources
3. Attitudes and assumptions

Educational developers often enter the field from different disciplines. As a result, not all have skills in both quantitative and qualitative program assessment, and many lack the statistical knowledge to analyze findings from quantitative studies. Additionally, the skills to develop a systematic, cohesive data collection system are rare.

Another barrier is a lack of resources. Primarily these include time, people, and funding, which together make it difficult to conduct in depth assessment in addition to meeting other centre mandates, including developing and implementing programs and services.

Finally, some people assume that impact cannot be assessed. Confounding factors in human research make it difficult to assess the impact of an initiative on both the future behaviour of teachers, and the learning of students. Additionally, there are ethical implications to assessing the students of teachers engaged in professional development as a result of power dynamics, not to mention the myriad variables that effect student performance beyond the teaching behaviours of individual professors.

Educational developers have reached the point at which they have a large number of available methods to assess the impact of initiatives. The next step is to overcome the barriers: the lack of knowledge, and the lack of resources and problems with attitudes and assumptions.

Lack of knowledge may be addressed by engaging the disciplinary expertise of colleagues with experience in qualitative and quantitative methods. These colleagues may come from a variety of disciplines, including Sociology, Psychology, and Education. There is a field of Program

Evaluation, with language and methods in areas such as Social Work and Business, but models may also be found in many other disciplines. Mathematics and Statistics departments include colleagues with expertise in statistical analysis. All institutions have university planning offices or offices of institutional analysis. These offices collect data regularly that may be valuable in assessing impact. Further some alumni offices or faculties conduct alumni surveys. Collaborative assessment projects will help to develop the skills and knowledge in assessment, building on one of the fundamental principles for assessment.

In terms of lack of resources, most centres have a limited number of full-time educational developers, who are often fully engaged in designing and running services and programs. One common response is to hire graduate students on a project basis. Some graduate students may be able to engage in carrying out program assessment as part of their regular graduate theses, while others may be hired as part-time support for a project. Collaborations that can help address a lack of knowledge and skills could also address resource challenges. For example, gathering data through an office of institutional analysis could reduce the expense and time required to conduct a survey. Combining surveys may also reduce the "survey fatigue" experienced by students.

Additionally, educational developers can work collaboratively at provincial, national, and international levels. As the assessment results of one institution are disseminated, other institutions could use the results in an evidence-based fashion. Grants offered by the Educational Developers Caucus (EDC) or through other funding agencies could support institutions engaged in assessment, or in systematic reviews of the literature. There are also opportunities to coordinate efforts through collaborations between COED, HEQCO, and other organizations to help address issues of assessment that are of greatest benefit to all centres.

In order to manage limited time and resources, it is important that we assess only what matters most. Centres must pay careful attention to what information is actually needed, and focus attention on the assessments that matter the most whether in terms of program development and enhancement, or in terms of program justification. Not every program will necessarily need to be assessed every time it is offered. It may be possible to establish a systematic cycle of evaluation, in which programs are assessed on a rotating basis, and the data are incorporated, implemented, and then assessed again at a future point. This will decrease the amount of time devoted to assessment each year, while increasing the chance that the data are used for enhancement.

It is important to accept that no assessment will be perfect. Where possible, triangulation of data will help to ensure that the results of any assessment are meaningful and robust. However, just because the measures are not perfect does not mean that engaging in assessment is not useful. Ensuring that assessment projects consult research ethics boards (REBs) will help to ensure ethical issues in assessing participants and their students are considered and appropriately addressed, and REBs often provide helpful feedback regarding research designs.

Overall, a change in attitude is required so that assessment is seen as part of effective and scholarly practice. This parallels the advice educational developers give to teachers; encouraging scholarly behaviour that is evidence based, reflective, and seeks out and incorporates feedback for ongoing enhancement. Assessment practices will be most effective if they are focused on formative "quality enhancement," rather than purely summative "quality assurance." Educational developers are reflective practitioners, and reflection is best when based on data and evidence, especially if the goal is practical, such as enhancement. A prime requirement is to make assessment of its own initiatives part of the mandate of each teaching

and learning centre and part of the regular allocation of resources for programs, and to ensure that scholarly examination of practices is part of the culture of educational development.

New Ideas

What can teaching and learning centres do in response to the challenges now facing our colleges and universities? We have proposed program assessment, which certainly has the potential to contribute to greater currency of effective teaching and learning practices amongst faculty, and thus may contribute to greater recognition of teaching excellence in tenure and promotion processes. The most critical factor determining a centre's influence on its institutional culture is whether or not it is recognized as an integral part of the colleges and universities' teaching and learning community. For such recognition to occur, the value of teaching and learning must be endorsed by the highest levels of the institution and beyond; indeed, ideally, at the provincial level. In addition to focusing attention on teaching and learning and engaging the broader community at colleges and universities, it is imperative for centres to make an impact on the faculty members themselves as they can have a tremendous impact on what a centre can do and achieve.

The themes presented earlier in this article – building capacity for effective teaching, changing institutional culture, and greater currency for teaching in the promotion, tenure and renewal process – could all contribute to an expansion of scholarly, evidence-informed teaching in Ontario universities.
Building capacity for effective and scholarly teaching has become imperative, especially if Ontario is to become competitive internationally. It is no longer enough for faculty members to be subject matter experts. Building the capacity for effective teaching, with the goal of improved learning, needs to be sustainably supported and widely understood. Historically, postsecondary teaching has not been held to the same standards or given the same priority and prestige as research. An important role for teaching and learning centres is to ensure that efforts to encourage, promote, support, facilitate, and design programs to help faculty develop as effective teachers are backed by more than just rhetoric. Teaching must be taken seriously in tenure, promotion, and renewal policies; criteria and decisions; supported by adequate resources; and promoted at the institutional, faculty, and department levels as an essential component of what it means to be a scholarly professional and ethically responsible academic.

Curriculum

Curriculum review and curriculum development may be the most efficient and sustainable strategies to build capacity for effective teaching because they have the potential to encourage effective practices at a structural level. Driven by outcomes based education and focused on teaching since their inception, Ontario colleges have recognized and integrated curriculum and teaching development. They also work at the program level so that all courses are linked via their individual outcomes to an overarching set of program outcomes that also reflect the needs of industry and are coupled with Essential Employability Skills.

Ontario universities are relative latecomers to pedagogically driven curriculum review and development. The recently introduced Ontario Council of Academic Vice Presidents' (OCAV) University Undergraduate Degree Level Expectations (UUDLE), together with Graduate University Degree Level Expectations, require faculty to address several broad educational goals beyond the traditional disciplinary content and methods. The incorporation of expectations (such as 'awareness of the limits of knowledge' and skills to communicate with 'a range of audiences') into degree programs and quality assurance procedures highlights the limitations of

conventional postsecondary teaching and assessment methods and the widespread need for support in adopting new approaches.

Explicit connections between teaching and curriculum also open new teaching development opportunities by motivating faculty engagement with two facets of development. As a result,

- development may become more accessible and relevant for faculty, as a consequence of being relocated in the local program and teaching context that is most familiar and important to them; and
- continuing development can be fostered by building teaching dialogue and common practices into pre-existing institutional communities, and by strategically using the information collected during curriculum reviews and development.

Professional Development

For much of their history, teaching and learning centres have focused on providing teaching development directly rather than on training faculty to provide teaching development for their colleagues. This may have been in recognition of the relatively low value accorded to teaching in many universities, which restricts the number of faculty willing to assume a teaching development role. However, increasing external attention to the quality of teaching in Ontario postsecondary institutions may lead to greater institutional expectations for faculty to participate in development activities. Train the trainer strategies allow centres to meet increased demands by focusing their limited resources on a small subset of faculty 'trainers,' and reaching the wider teaching community indirectly through the resulting faculty 'trainers.'

Fields that have gone through significant changes in requirements for curriculum and educational outcomes – such as medical and health professional education – have attempted to employ 'train the trainer' strategies to try to ensure that most, if not all, faculty are supported in teaching (relatively) unfamiliar curricular material, and in the use of appropriate teaching and assessment strategies. Ontario examples include initiatives to support the teaching and assessment of 'novel' competencies (such as physician-patient communication skills) identified by Educating Future Physicians of Ontario during the 1990s, and for the subsequent adoption of CANMEDS competencies (such as 'advocacy' and 'scholar') by the Royal College of Physicians and Surgeons for resident (i.e., post graduate medical) education. However, experience in these fields also shows that faculty 'trainers' often find it is challenging to implement local training and to engage large numbers of their colleagues. Ultimately, success with train the trainer models may depend on the kinds of institutional cultural change discussed below.

Elevating the importance of teaching as a profession with the self-reflective growth that this entails must be a priority for teaching and learning centres and the institutions they serve. One way to do this would be to encourage and support participation in teaching development programs such as Instructional Skills Workshops (ISWs) or similar programs (such as the Teaching Improvement Project System which is widely employed in medical education). The ISW is a peer-based, experiential instructional development program designed to enhance the teaching effectiveness of both new and veteran instructors. These workshops explore teaching concepts, build on existing abilities, and provide opportunities to practice new teaching approaches through face-to-face instruction, theory application, and discussion. Participants have opportunities to actively practice teaching and receive feedback in a supportive environment. The ISW is a collaboration between facilitators and participants that is grounded in active, experiential learning, and based on the principles of learning-centred teaching. While the workshops are not new, it would be beneficial for institutions to support and actively

encourage participation and find ways to ensure that both faculty and graduate students participate.

Research about the impact of the ISW workshops is also critical (HEQCO currently has a research project underway at three Ontario universities), although evaluation research on the Teaching Instructional Professional Strategies (TIPS) program is encouraging (for Canadian examples, see D'Eon, 2004, and Pandachuk, Harley & Cook, 2004). A wide variety of other studies have reported significant positive effects of teaching improvement programs on participating university faculty, with some showing benefits to students as well in comparison to control groups which have not participated in these programs (Stes, Min-Leliveld, Gijbels & Petegem, 2010).

Cultural change requires commitment from educational developers and institutional administrators alike. It is important for teaching and learning centres to find ways to influence their institutional cultures at multiple levels, through multiple channels, and with short- and long-term goals in mind. In order to effect such change, teaching and learning centres must be perceived as valuable resources.

A culture that values teaching and learning will commit time and find solutions and approaches that work at a deep and sustainable level, rather than those that act as Band-Aid solutions. Institutions must demonstrate the strong positive value of contributions to their teaching mission. The value of teaching can be demonstrated in a variety of ways, including through institutional policies and procedures (especially in tenure and promotion), communications, resource allocation, and through a wide variety of practices such as teaching support and recognition. The creation of high profile teaching fellowships ("Teaching Chairs") at the provincial level, and support for educational leadership development may lead to a greater sense of value.

The importance of high quality teaching for Ontario colleges is built into their institutional cultures through the mandate to provide faculty development programs, which all new faculty are required to complete. These programs include courses designed to help faculty develop or further their competencies in curriculum planning, design, delivery and evaluation, as well as the integration of instructional technology tools. They also assist college faculty in better understanding the challenges of a diverse and complex teaching and learning community, both inside and outside the classroom.

It is widely felt, however, that universities in particular need to strengthen the value of teaching within their cultures. In the mid 1990s, the STLHE led centres across Canada in a campaign to "Make Teaching Count." One result of that campaign was that many institutional policies on tenure and promotion took greater account of teaching, although it is debatable whether teaching is actually given more weight than previously.

The recent resurgence of strategies designed to increase the value accorded to teaching by universities has been led by individual institutions rather than a national organization. The creation of high profile (though short-lived) awards for "Leadership in Faculty Teaching," and fellowships ("Teaching Chairs") at the provincial level can be effective ways to demonstrate the status and value of teaching. Any such support for educational leadership development may lead to a greater sense of value to college and university faculty who view it as a priority of their role.

Three Ontario universities (Queen's, Ryerson, and most recently McMaster) have established high profile Teaching Chair roles as a way to demonstrate the status and value of teaching.

This approach deliberately confers a title and role, both of which have conventionally been used to recognize leading researchers. By establishing Teaching Chairs, institutions may also be able to elevate the perceived prestige and status of teaching among faculty.

Several centres (including Ryerson, Windsor, and York) are developing programs to support faculty who assume academic leadership roles in their institutions, while Ontario colleges already have an established group for curriculum leaders. Academic and educational leadership programs are well-established in two Ontario medical schools, the first at the Department of Family and Community Medicine at the University of Toronto, followed more recently by the University of Ottawa. Leadership development programs will complement existing activities, which focus on increasing the understanding and skills of individual teachers. Academic leaders can institute policies, procedures, and practices to influence the overall institutional culture in ways that support high quality teaching and learning.

In addition to programs aimed at supporting faculty who assume academic leadership roles, educational development initiatives targeted at Deans and Chairs would be a new way to get administrators interested in teaching and learning innovations, as well as established evidence-based practices (although there is a long history of leadership development for senior academic administrators, programs with a strong focus on *educational* leadership are still rare). A focus on leadership and change management to improve teaching and learning may address a perceived gap in professional development available for leaders of Ontario's postsecondary institutions. These developing programs may also help to establish a cadre of postsecondary leaders who are exceptionally knowledgeable about the evidence-informed principles and practices that underlie high quality teaching and learning, and equally well-prepared to advance institutional and sector-wide changes that could result in improvements to the quality of the entire postsecondary education system in Ontario. These leaders have to be supported and encouraged to become "super-spreaders" of scholarly and effective teaching practices. Ongoing professional development is critical for such leaders, who need to know how to communicate what they are doing and manage the projects that they are leading. Since many of the people involved in projects within teaching and learning centres are volunteers, finding ways to manage them successfully was noted as something that could be of great benefit.

An unanticipated benefit of the HEQCO workshop was the opportunity to learn about the programs that had been developing separately, and to begin to explore potential collaboration and organizational connections that could give a greater recognition to a leadership development program and support the sharing of expertise across institutions.

Expectations for Postsecondary Teaching

There have long been teaching accreditation programs for faculty members in the United Kingdom and Australia; as part of the Bologna Process, continental Europe seems prepared to follow suit. If Ontario is to fulfill its goals for increasing the number of international students, it will need to ensure that postsecondary teaching here is of comparable quality to that found in competing international institutions. In North America generally, the evaluation of teaching is held to lower standards than the evaluation of research, if it is held to any standards at all. Similarly, expectations for effective teaching are sometimes considered less important – and standards may be lower – than research. The University of Windsor has led the way forward in Ontario, creating an accreditation program of three developmental certificates in university teaching, each including rigorously assessed graduate courses. This is the first teaching certification program in North America to be recognized by the UK-based Staff and Educational Development Association (SEDA).

Evidence-informed practice involves using research to guide educational decisions regarding teaching and learning approaches, strategies, and interventions. With the increased focus on accountability and outcomes based education, evidence-informed practice must be an integral part of curriculum and faculty development. While understandings of "excellent" teaching are varied, and even contested at times (Skelton, 2005; Skelton, 2007), there is sufficient research on how instructional variables influence student learning to warrant explicit expectations and criteria for effective teaching (i.e., teaching that leads to high quality student learning) (Biggs & Tang, 2011).

These research-informed expectations must be embedded in policy. They should also be applied in both tenure and promotion decisions, and in formative assessment of curriculum and instructrion (such as teaching evaluations), and aligned with the teaching development programs that are provided by centres. Identification of these and other important expectations about teaching must be done in collaboration with faculty and other relevant professional organizations, academic administrators, and teaching and learning centres. Ideally, these variables should also be included among indices of teaching quality required by government as was the case in Australia (the Course Experience Questionnaire was a required institutional measure of teaching quality for many years).

Going Forward

Opportunities for collaboration and sharing, beyond those at occasional academic conferences, are needed to advance the effectiveness and impact of Ontario's evolving teaching and learning centers. In both the college and university sectors, the community of faculty and administrators committed to enhancing teaching and learning quality need time and resources to facilitate active networking and collaboration on projects. In the last few years the SoTL and teaching and learning centre community in Ontario has established connections between previously separate college and university networks and increasingly shared our existing resources. Ontario's centres have also established new collaborative networks to collate and develop resources to support emergent responsibilities such as curriculum development and accessible teaching. The resources are currently located in web-based repositories; access is limited to Ontario institutions, but this restriction could potentially be lifted. On the other hand, previous experience with COED and other national educational development networks suggest that shared interests and enthusiasm are not enough to maintain continuity and to develop and successfully implement collaborative projects.

While the sharing of tools and resources is a significant step forward, we also need to consider the goals of collaboration and networks from a more strategic perspective. Two of the issues that need to be addressed most urgently are building capacity for educational development, and maximizing the impact of centres on teaching and learning in postsecondary institutions.

Increasing the supply of experienced educational developers

Access to educational development information and tools alone is insufficient to ensure their effective use. Effective educational development requires both a good general understanding of the field, and skill in its practice. However, there is an unfortunate coincidence between the expansion of the roles and responsibilities of centres, and in the retirement of the first generation of educational developers and the rise in demand for qualified staff to replace them. This has left a relatively small pool of trained and experienced Canadian developers in the midst of a national and even international shortage.

If Ontario is to gain leadership in the quality of postsecondary education and teaching, it will need to draw upon the expertise, leadership and support of educational developers, and must act quickly to increase their numbers through recruitment and appropriate professional development, and by stabilizing existing centres and career pathways in order to retain experienced staff. In the past, developers frequently built their expertise and skills by working their way up through unofficial apprenticeships and mentoring in the centres that existed at that time. They often began by organizing and perhaps facilitating activities such as workshops, or by bringing a specific area of useful expertise or experience. In the absence of formal training, and with limited opportunities for apprenticeship, centres and centre networks must find new ways to build and sustain adequate and ongoing professional development in the field.

One recent approach is to accelerate professional growth and development of new entrants to the field by focusing them on one area. The increasing responsibilities of centres encourages a degree of specialization anyways, an evolution in staffing that can be seen in some of the larger and better-resourced centres. In many new or less well-resourced centres, entrants have to find their own way as pioneers in their institutions, with intermittent support from external contacts and conference events.

More senior development positions, meanwhile, typically require breadth as well as depth of expertise, and developers must often learn 'on the job.' The success of many Ontario developers is a tribute to their motivation, capability for self-directed learning and critical reflection, supportive colleagues, and involvement in educational development centre networks and organizations. However, similar to student learning, the research on professional development shows clearly that mentoring, feedback, interaction with peers and opportunities to observe experienced colleagues are important components of professional development. In the absence of formal training and with limited opportunities for apprenticeship, centres and centre networks need additional resources to build and sustain adequate and ongoing professional development for developers at all levels.

One potential professional development strategy which has been viewed positively by developers working in Canadian medical schools is an exchange program. More recently, the Staff Educational Development Association (the UK equivalent to our national Educational Developers Caucus) approached the EDC to explore interest in international exchanges. The immersive experience of an exchange allows developers time to see and better understand different developmental approaches and practices, to compare notes, and so to reflect critically on their own practices. To date such exchanges have been based primarily on opportunistic add-ons to conference travel or through sabbatical visits.
However, the continuing viability of informal exchanges as a professional development strategy is increasingly being challenged by the expanding numbers of developers that would benefit from such experiential learning, and by reductions to conference travel. Sabbatical leaves, meanwhile, are rarely available to developers hired in staff rather than academic positions.

Innovative alternatives to the informal exchange model have been implemented by the University of Windsor, which recently established Visiting Fellows programs for senior educational developers and for postgraduates, and by Carleton University, which established a post-doctoral position to help recent graduates transition into the field. Again, supporting such programs requires additional resources, although the investment brings returns of new ideas and an expansion (even if only temporary) of staff resources. While providing professional development support for educational developers is a new and additional responsibility for centres, it may prove to be an important and viable strategy for building the future of the field.

Maximizing impact

A strategy with the potential to increase the individual and collective impact of centres is that of establishing a series of common, high-priority foci for their activities. A common focus across institutions also maximizes the benefit of collaborative networks and shared resources. An example of this strategy is the thematic approach to teaching enhancement developed in Scotland. Partnership between the Quality Assurance Agency and a committee of senior academic administrators from Scottish higher educational institutions has resulted in a unique approach to quality enhancement. The Scottish strategy has been to select a limited number of rolling themes for educational enhancement which are to be addressed and embedded by all higher education institutions over a given period. The approach legitimates educational development centres by assigning strategic value to their work. Further, external pressure from competing institutions and the quality assurance agency is likely to encourage institutions to resource centres appropriately, and to involve centres closely in the leadership of educational policy and strategy.

Another potential benefit of a national (or in our case, provincial) and institution-wide emphasis on enhancement themes and effective practices is that it reframes the need to improve teaching quality in a way which may help to increase the reach of centres across their institutions. A perennial concern is that the faculty who make the most use of centres are often those with the greatest interest in enhancing their teaching rather than those with greatest need for it. The framing of teaching development as a universal priority for *all* faculty can help displace misperceptions that teaching centres focus on individualized remediation for a few inadequate teachers. As it becomes 'normalized' and valued, participation in teaching development can become an accepted part of institutional culture.

Normalization may also help to overcome instructors' widespread but sometimes inaccurate perceptions of themselves as 'good' teachers who, by implication, do not need to make changes in their teaching. Perhaps most important of all, widespread teaching development may help correct the perception of some instructors that student numbers and/or inadequacies are the source of any problems in teaching, and so it may encourage instructors to adopt more effective instructional approaches (Lukas, 2002).

A second approach to increase the impact of teaching centres that has been proposed recently is to involve teaching and learning centres in the early stages of institutional strategic planning and policy development. Educational developers can provide substantial experience and expertise to guide strategic directions and policy on educational issues. Educational developers can also make substantial contributions as *facilitators* of the critical processes of review and development of institutional strategy and policy (Schroeder et al., 2011). These strategies would strengthen the impact of centres by enhancing their key positional relationships in the institution, and their recognition and inclusion in institutional activities (Bedard, Clement, & Taylor, 2010).

If centres are to move forward in this way, senior academic administrators will need a better understanding of the potential contributions of their centres, and to adjust structures and reporting lines to institutionalize these connections. Building alliances with institutional organizational development units may be one way to increase awareness of centres' potential contributions in this area. However, the recognized vulnerability of centres to restructuring as new senior administrators are appointed suggests that close association with the academic administration can create risks in proportion to the potential benefits. It remains to be seen whether the emerging trend toward appointing senior educational developers as university Vice

Presidents (or equivalent) for Teaching and Learning will strengthen the benefits and reduce the risks.

A third strategy which could be used to maximize centres' impact on the quality of teaching and learning is for centre networks to take a more proactive role as provincial and national advocates for teaching and learning. Recent experience suggests that the benefits can be mutual, and interest in affiliation with the Council of Ontario Universities (COU) was a catalyst which strengthened the informal network of Ontario developers and centres. COU recognition of the network as COED has helped to legitimize the 'voice' of developers in provincial-level discussions of teaching and learning. Ontario centres can potentially increase their impact by becoming more proactive participants in these dialogues with COU and by engaging with governments, student organizations and the public.

Our final suggestions for going forward are to build on a proactive stance and rely on the perspectives and expertise of Ontario centres and networks. The unique role and position of teaching centres confers upon developers a deep and comprehensive understanding of teaching across their institutions. Developers are hence ideally positioned to reflect critically on prevailing practices and what they reveal about the underlying values which shape postsecondary teaching, and to facilitate thoughtful internal and public dialogue about the purposes of postsecondary education. Centres must also be cognizant of, and engaged in inquiry into, the underlying values and assumptions that shape current educational development practices, and into models and approaches that could enhance or transform their future impact on teaching and learning.

Conclusion

We are greatly encouraged that HEQCO has invited members of the Ontario educational development community to reflect critically and imaginatively on these issues. In so doing, HEQCO has shown leadership in responding to the recommendation to strengthen the role of teaching and learning centres arising from its earlier initiative, 'Taking Stock.' Our report takes stock of educational development in Ontario, and in turn makes recommendations and suggests future directions. We hope that this report will increase recognition of past contributions of educational development centres to the quality of postsecondary teaching and learning in Ontario. More importantly, we hope our report will lead to greater understanding of how centres can potentially contribute in the future, and will stimulate new and powerful initiatives to enhance the quality of Ontario's postsecondary education system.

References

Bedard, D., Clement, M., & Taylor, K.L. (2010). Validation of a conceptual framework: the meaning and scope of educational development. Chapter 8 in Building teaching capacities in higher education: A comprehensive international model. Saroyan A. and Frenay, M. (Eds.). Sterling, Virginia: Stylus Publishing LLC.

Biggs, J. (2001). "The reflective institution: Assuring and enhancing the quality of teaching and learning", *Higher Education, 41*, pp 221-238.

Biggs, J. & Tang, C. (2011). *Teaching for quality learning at university*. Society for Research into Higher Education.

Brint, S. (2009). "The Academic Devolution? Movements to Reform Teaching and Learning in US Colleges and Universities, 1985-2010," *CSHE Research & Occasional Paper Series*.

Britnell, J., Brockerhoff-Macdonald, B., Carter, L., Dawson, D., Doucet, L., Evers, F., Hall, S., Kerr, D., Liboiron-Grenier, L., McIntyre, G., Mighty, J. Siddall, G., & Wilson, J. (2010). *University Faculty Engagement in Teaching Development Activities, Phase II*. Toronto: Higher Education Quality Council of Ontario.

Christensen Hughes, J. & Mighty, J. (eds). (2010). *Taking Stock: Research on Teaching and Learning in Higher Education*. Toronto: Higher Education Quality Council of Ontario.

D'Eon, M. (2004). "Evaluation of a teaching workshop for residents at the University of Saskatchewan: A pilot study," *Academic Medicine*, vol. 79, pp. 791-7.

Frielick, S, & McLachlan-Smith, C. (1999). "The value (added?) of academic development" *HERDSA Annual International Conference*, Melbourne 12-15 July.

Gibbs, G. & Coffey, M. (2004). "The impact of training of university teachers on their teaching skills, their approach to teaching and the approach to learning of their students". *Active Learning in Higher Education, 5,* pp. 87-100.

Gosling, D. (2009). "Educational development in the UK: a complex and contradictory reality" *International Journal for Academic Development,* Vol. 14, No. 1, pp.5-18.

Guskey, T.R. (2002). "Does it make a difference? Evaluating professional development." Educational Leadership 59., 6: 45, +. Academic OneFile. Web. 15 Dec. 2011.

Kirkpatrick, D. (1996). "Great Ideas Revisited: Revisiting Kirkpatrick's Four Level Model", *Training and Development*,54-59 January.

Lucas, A.F. (2002). Reaching the unreachable: Improving the teaching of poor teachers. Chapter 16 in A Guide to faculty development: practical advice, examples and resources. Anker Publishing.

Miles, C.A. & Polovina-Vukovic, D. (forthcoming). *The role of new faculty orientations in improving the effectiveness of university teaching*. Toronto: Higher Education Quality Council of Ontario.

Notes for Remarks by the Honourable John Milloy, Minister of Training, Colleges and Universities, Canadian Club, May 30, 2011, http://www.tcu.gov.on.ca/eng/postsecondary/speech_may.html

OUSA. (2011). *Policy Paper: Student Success and the Future of Quality Education*.

Pandachuk,K., Harley,D., & Cook, D. (2004). "Effectiveness of a brief workshop designed to improve teaching performance at the University of Alberta", *Academic Medicine*, vol. 79, pp. 798-804.

Plank, K.M. & Halish, A. (2010). "Program Assessment for Faculty Development" in *A Guide to Faculty Develoment 2nd ed* pp. 135-149.

Scarfe, A. (2004). "An Historical Overview of Instructional Development in Canadian Higher Education," *Teaching and Learning Bridges. Vol. 2, No.4.*. (http://www.usask.ca/gmcte/drupal/files/Bridges_Jan04.pdf)

Schroeder, C.M. and Associates (2011). Coming in from the margins: faculty development's emerging organizational development role in institutional change. Stylus Publishing LLC: Sterling, Virginia.

Skelton, A. (2005). *Understanding 'teaching excellence" in higher education: Towards a critical approach*. London: Routledge, 2005.

Skelton, A. (2007). *International perspectives on teaching excellence in higher education: Improving knowledge and practice*. London: Routledge, 2007.

Society for Teaching and Learning Constitution, http://www.stlhe.ca/en/stlhe/documents/constitution.php (retrieved 2011)

Stes, A., Min-Leliveld, M., Gijbels, D., & Van Petegem, P. (2010). "The impact of instructional development in higher education: The state-of-the-art of the research," *Educational Research Review*, vol. 5, pp. 25-49.

TD Economics, Strategy for Higher Learning Required: *Access to Post-Secondary Education is Core to Future Prosperity http://www.td.com/document/PDF/economics/special/td-economics-special-ca0510-pse-pr.pdf.*

Vajoczki, S., Fenton, N., & Menard, K. (2011). *Teaching-Stream Faculty in Ontario Universities*. Toronto: Higher Education Quality Council of Ontario.

Wilson, M., &Ens, E. (2010). "Can we do the impossible? Evaluating for impact*", Educational Developers Caucus Winter Conference*.

Wolf, P., Hill, A., &Evers, F. (2006). *Handbook for Curriculum Assessment* http://www.tss.uoguelph.ca/resources/pdfs/HbonCurriculumAssmt.pdf

Appendix 1: Examples of Assessment Practices[1]

Level Of Assessment	Examples of Assessment Practices
Level 1: Reaction Measuring Initial Reaction	• Counting participants (total registration numbers including both repeat registrants and only unique participants) • Examining change in participation across disciplines and roles • Analyzing the frequency and change in repeat registration
Level 2: Reflection on Learning Immediate Reflection on Learning	• Reported comfort level with reflective practice • Reported comfort taking risks in teaching • Survey or questionnaire to determine what is remembered (paper, telephone, online) • Pre/post-tests of knowledge or skills before and after programs
Level 3: Change Organizational Support and Change	• Change in university response (decreasing negative response, increasing positive reaction as seen in e-mail and testimonials) • Documented change in resource allocation by the institution (e.g. budget, upper administrative positions) • Analysis of micro/meso/macro levels of programs and services (qualitative analysis using brainstorming with the educational development team to examine each program and service) • Analysis of consultation topics for trends over time • Undergraduate Program Reviews – relevant comments
Level 4a: Results Changed Practice for Teachers	• Baseline measures compared to results following a longer program including: learning plans, teaching philosophies, goals, expected obstacles, understanding of scholarly teaching • Pre/post scores on inventories such as Approach to Teaching Inventory (ATI),[2] Self-Efficacy Inventory (Boman[3]) • Self-report of impact, benefits , knowledge (paper, online, phone)

[1] Source: 20 Higher Education Institutions from Ontario, March 2011.
[2] Keith Trigwell, Michael Prosser, and Paul Ginns, Phenomenographic pedagogy and a revised approaches to teaching inventory. Higher Education Research and Development, 24(4), 349–360 (2005).
[3] Jennifer Boman, *Outcomes of a Graduate Teaching Assistant Training Program* (Unpublished doctoral dissertation). The University of Western Ontario, Canada, (2008).

Level Of Assessment	Examples of Assessment Practices
	• Observer reports (such as Teaching Behaviour Index) • Change in approach to learning and teaching problems following a program (observations or focus group reports) • Examination of learning objects or teaching artefacts (syllabus, assessments, teaching dossiers) • Faculty retention rates
Level 4b: Results Changed Practice for Students	• Thematic analysis of teaching evaluations for change over time • Pre/post-tests of students prior to implementing an initiative • Student focus groups in class and outside of classroom • Key performance Indicators (KPI) • Student Evaluations of Teaching (SET) changes over time

Appendix 2: Question Bank: Evaluating for Impact

Margaret Wilson, 2010

The following questions are organized according to Guskey's (2000) five levels of evaluation.

1. Reaction: Measuring initial satisfaction with experience
Information use: To improve design and delivery

Overall, how would you rate this session?	1.....5 Use likert scale to measure

Would you recommend this session to a colleague?
Were your expectations met during this session?
Did the session meet your expectations? Why? Why not?
What were your expectations for today's session?
What did you like the most? What did you like the least?
What did you find most useful?
What did you find most engaging?
Did the material make sense?
Was the facilitator knowledgeable and helpful?

2. Immediate Reflection on Learning: To measure knowledge/skills of participants
Information use: To improve program content, organization

What were you surprised to learn?
Did you learn anything unexpected today?
What is your most significant take-away from this session?
What did you learn that is new?
What did you learn that challenges your beliefs? Current teaching practice?
As a result of this workshop/session, I plan to.....
What is the most important thing you learned today?
How has your thinking changed?
How will you change your practice?
3-2-1 Reflection: 3 important ideas you want to remember
2 questions you still have
1 way that the session will positively impact your practice
Pre-Post: Before the session begins have participants reflect on what they know and what they want to know about the topic in question. At the end of the session have participants identify what they have learned. Use one sheet (3 columns) for this assessment.
Are you likely to change some aspect of your practice as a result of this workshop?
Are you inspired to find out more about the issues?
How do you intend to apply what you have learned?

3. **Organization Support & Change:** To measure the organization's advocacy, support, accommodation, facilitation, and recognition.
   Information use: to document and improve organizational support and to inform future change efforts

Have you spoken with a colleague about this workshop?
What did you feel was most important to convey to your colleagues about this workshop?
If you haven't spoken with your colleagues about this workshop, why not?
What you have discussed with your colleagues?
How did this affect your teaching evaluations?
Were sufficient resources made available?
Were successes recognized and shared?
Did you experience any institutional/departmental blocks?
What would it have taken for you to change more?
Did you seek approval to make changes to your teaching practice?

4. **Participant Use of New Knowledge and Skills:** To measure degree and quality of implementation (impact on teaching practice)
   Information Use: To document and improve the program content

Have participants write an intention statement, seal that statement in an envelope and mail that envelop back to them 6 months following the workshop/ educational intervention.
What class would better suit the changes you are anticipating?
What are you doing now that you didn't do before?
Bring people back a semester later to talk about what they have done (focused discussion).
How did you change your teaching practice?
Have you experimented with any of the ideas from the workshop?
Has your confidence about your teaching practice changed since the workshop?
Have you had enough time to change your practice?
Did you try some changes? How did they work out?
What would it have taken for you to change more?
Can you identify reasons that you have not changed?

5. **Student Learning Outcomes**: To measure changes in student performance and achievement.
   Information use: To demonstrate the overall impact of the educational development event.

How would your students see/experience your change?
How will you know that this change has affected your students' learning?
Are you noticing any difference in student performance? Achievement?
Are you noticing any difference in student confidence in learning?
Are you noticing any difference in student retention? Engagement?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