Higher Education Instructional Change in a U.S. Context: Investigating the Scholarship of Teaching and Learning (SoTL) Innovations at Niagara University Cambiamento dell'Istruzione Superiore negli Stati Uniti: Una ricerca sulle innovazioni relative alla Scholarship of Teaching and Learning (SoTL) presso la Niagara University

> Cynthia L. Kline, M.Ed. cmckline@roadrunner.com Paul J. Vermette, Ed.D. Timothy M. Downs, Ph.D. Danyelle A. Moore, M.Ed. Niagara University, New York, USA

ABSTRACT

In mid-September 2013, two of the authors visited Lecce, Italy, presenting at a conference on higher education. Ten powerful and significant changes occurring across the vast U.S. collegiate panorama were shared. This list featured developments that made their way from theory to differing levels of implementation and practice at a small, highly regarded Vincentian university called Niagara, in the northwest corner of New York State. Among the highlighted initiatives, first and foremost, was the commitment to the Scholarship of Teaching and Learning (SoTL), Ernest Boyer's vision of an alternative scholarly route to success for faculty via instructional excellence.

SoTL changes a university's culture, placing the teaching of students as a supremely important priority and the scholarship resulting from formal study of teaching as equivalent to that of traditional disciplinary research investigations. The experiences at Niagara University provide both a case study of implementation in one modern U.S. institution and a mirror with which to compare events in various institutions across Italy. The work occurring at Niagara rivals that of more prominent U.S. universities recognized as forerunners in the burgeoning SoTL movement. This article provides a brief history and definition of the Boyer Model of Scholarship, and suggests how institutions might adopt this paradigm to better develop faculty and appropriately assess the essence of the work they perform as professors.

A metà Settembre 2013, due degli autori di questo articolo sono stati a Lecce (Italia) realizzando una presentazione in una conferenza sull'istruzione superiore. In quella sede, è stato possibile condividere con i partecipanti i dieci cambiamenti più potenti e significativi che hanno avuto luogo nel vasto panorama dell'accademia americana. L'elenco si componeva di sviluppi di tipo teorico; così come da diversi livelli di implementazione e pratica presso l'Università di Niagara, nell'angolo Nord Est degli Stati Uniti. Tra le iniziative messe in evidenza è stata prima e soprattutto menzionato il lavoro di Ernest Boyer sulla Scholarship of Teaching and Learning (SoTL), ovvero la sua visione su strade alternative comunque accademiche, basate sulla didattica, per il successo della formazione universitaria.

Il percorso tracciato dal movimento SoTL cambia la cultura universitaria, collocando l'insegnamento come priorità; e la "scholarship" (ricerca didattica) emergente dagli studi sull'innovazione didattica come una disciplina di ricerca che può alinearse ad altre nell'ambito accademico. Le esperienze all'Università Niagara forniscono sia un caso di studio dell'implementazione dei suddetti concetti in una moderna istituzione americana; sia un'opportunità per la comparazione con i vari casi delle istituzioni italiane. Inoltre, il lavoro portato avanti dall'università di Niagara risulta competitivo con riguardo ad alcune delle più riconosciute università americane, potendo essere considerato all'avanguardia dell'emergente movimento SoTL. Questo articolo fornisce un breve resoconto e definizione del modello di Boyer su SoTL, suggerendo come le istituzioni potrebbero adottare tale paradigma sia come strategia per lo sviluppo professionale accademico, sia come adeguata base per la valutazione del lavoro del docente universitario.

KEYWORDS

Boyer model, faculty development, faculty learning communities, instructional support, SoTL. Modello di Boyer, Sviluppo Professionale del personale Accademico, Comunità di Apprendimento Professionale in ambito accademico, supporto alla progettazione, SoTL. Formazione & Insegnamento XII – 1 – 2014 ISSN 1973-4778 print – 2279-7505 on line doi: 10746/-fei-XII-01-14_11 © Pensa MultiMedia

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1. A Historical Perspective on Scholarship

Conversations have evolved over the last 25-30 years regarding the efficacy of higher education and the differences in institutions offering degrees of higher learning. While the research universities of the world are well recognized and noticeable for their many accomplishments and contributions to society and their advancements in thought and innovations, these institutions are a minority of the overall institutions charged with educating students at the post-baccalaureate level, and beyond. More specifically, the majority of institutions providing a college-level education in the United States have a more narrowly defined niche in the educational market, namely, focusing their efforts as institutions that emphasize undergraduate education (associate's degrees or bachelor's degrees) or offer both an undergraduate education as well as select graduate and professional degree programs. The genesis of this article suggests that with each of these types of institutions it may best serve their respective faculty by adopting the Boyer Model of Scholarship (1990) as a means to evaluate the contributions of faculty to their institutions and academic disciplines.

In terms of the initiation of this conversation, the Carnegie Foundation for the Advancement of Teaching contracted with Ernest Boyer and a group of his colleagues in the 1980's to assess how faculty research might be reconsidered to best fit the range of higher education institutions in the United States. This issue became prevalent in U.S. higher education as a result of the growth in the number and size of higher education institutions, which then led to the need for a more refined definition of the types of institutions that exist and the respective missions and goals of each institutional type. Braxton, Luckey, and Helland (2002) provide an excellent edited work that focuses on this very issue. The three main types of institutions are:

- Research Universities
- Master's Degree Granting/Comprehensive Institutions
- Liberal Arts Colleges and Universities

In addition, many states, counties or cities in the United States have developed community colleges that offer associate (2-year) and technical degrees, preparing students to either pursue a 4-year degree elsewhere or enter a vocational field in their area of education or certification. The major premise of Boyer's treatise is that each type of institution described above naturally requires different types of work, with the corresponding faculty evaluation processes carefully aligned with the institutional mission and expectations of faculty. In order to advance this premise, Boyer's Model placed a great emphasis on the evaluation of faculty research, with the goal of expanding this category of evaluation to include a typology of four types of *scholarship*, which are as follows:

- Scholarship of Discovery: traditional, peer-reviewed research and publications, and peer-reviewed grants.
- Scholarship of Integration: activities that lead to a synthesis of knowledge, possibly in the form of edited publications, textbooks, etc.
- Scholarship of Application: activities applying a premise of scholarship in social, educational or industry contexts; leading to outcomes such as industrybased education, service learning projects and publications, presentations to professional societies, etc.

 Scholarship of Teaching and Learning (SoTL): focusing on the instructional design and processes as well as pedagogical outcomes and the improvement of educational experiences; can result in in-service training activities, conference presentations or peer-reviewed publications.

With this expansion of "recognized" faculty work from the single category of traditional, peer-reviewed research to a more robust set of four categories, defined as scholarship, institutions can better recognize the scope of faculty activities and faculty have the ability to better define the objectives of their scholarly work and professional activities. Of course, it is incumbent upon each institution to define which types of scholarship will be recognized and rewarded in terms of the traditional practices of faculty evaluation, including promotion and tenure.

An evolution of thought, yielding many great debates in higher education, has ensued as to the quantity and quality of research, preferably now referred to as scholarship, required in order for faculty to receive positive evaluations and qualify for promotion and tenure. Glassick, Huber and Maeroff (1997) provide substantive recommendations for the evaluation of professors. Institutions potentially considered as more progressive have made the distinction between the types of scholarship that faculty can and should be encouraged to engage in, and these same institutions clearly demarcate the rationale that their expectations are in alignment with the mission of the university. Many universities adopting the Boyer Model of Scholarship have also clearly articulated that a sufficient amount of peer-reviewed works must be included in a faculty portfolio in order for faculty to receive a positive performance evaluation.

Adoption of the Boyer Model by comprehensive institutions has been recognized as a viable solution to assist faculty with substantive teaching obligations, to also have the ability to develop a recognized and respected scholarship portfolio. Henderson and Buchanan (2006) affirm this perspective when they state: "The scholarship of teaching and learning seems a natural fit for teaching-intensive settings where the blend of scholarship and teaching issues can lead to work that will be appreciated and rewarded by colleagues in the faculty and administration" (p. 536). In consonance with this premise, numerous colleges and universities have adopted the Boyer Model of Scholarship, especially master's degree granting institutions and liberal arts colleges and universities. Although research-focused universities remain fairly consistent with their expectations of faculty, expecting a high degree of peer-reviewed publications as well as the receipt of external funding from federal, state and private agencies, some of them have also begun to recognize a wider scope of scholarly activities as acceptable forms of professional work by their faculty.

One irony of higher education is that although most faculty received their academic development and terminal degrees from doctoral granting institutions, the majority of those same faculty will not be employed as professors by doctoral granting institutions. As a result, faculty employed by the master's comprehensive and liberal arts colleges and universities quite often need to assimilate to a different faculty role than that of the people who served as their mentors and advisors. With the appropriate structures and developmental processes in place at these institutions, the majority of these faculty transform themselves into excellent teacher-scholars. In addition, faculty choosing positions at institutions that do not primarily focus on traditional research must not just become excellent teachers, but they must also be willing to engage in service and student advising.

2. Institutional Commitment to the Boyer Model of Scholarship

Institutions choosing to adopt the Boyer Model need to proceed carefully in order for this paradigm shift to succeed. This article presents Niagara University (NU) as one such institution that has adopted the Boyer Model, emphasizing the Scholarship of Teaching and Learning (SoTL) as a viable model for the creation of an efficient framework that maximizes faculty efforts in teaching and scholarship. This transition occurred with a change in leadership in academic affairs and a subsequent adoption of the Boyer Model, using the premise that institutions with higher expectations for teaching, service and student advising could best be served by this paradigm.

Initial conversations on the Niagara University campus strategically occurred with open discussion forums as faculty sought clarity regarding the expectations of their new academic vice president in order to be positively evaluated, either as an assistant professor or as a result of post-tenure reviews. Once faculty understood that the Bover Model was accepted as an enhanced framework for evaluation, faculty development workshops were offered to further advance the Boyer Model and SoTL. The co-chairs of the University Promotion and Tenure Committee have also presented this framework to faculty in addition to being proponents of the use of a well-designed portfolio as essential to faculty clearly demonstrating the efficacy of their work. In order to perpetuate this philosophy, Niagara University's faculty development center's coordinator also began to espouse the viability of the Boyer Model and SoTL. In keeping with this focus, in the current academic year, a tenured professor has been assigned duties as the coordinator (lead faculty member) of the Faculty Learning Community (FLC), a forum that promotes faculty development across a wide variety of topics. As the lead faculty member of the FLC this individual has become the champion of this paradigm shift. Because this individual is a highly regarded colleague, faculty are moving toward embracing the Boyer Model and SoTL to an even greater degree. Faculty development activities, sponsored by the university and facilitated by faculty and staff at NU, continue to further this movement toward becoming teacher-scholars. Most importantly, faculty at Niagara University fully understand that the Boyer Model is acceptable to use as a framework for faculty development plans and portfolios, annual and posttenure evaluations, and promotion and tenure applications.

Additional outcomes to this paradigm shift include confirmation that ongoing faculty development is imperative and reliant upon clearly defined faculty expectations. Finally, the development of scholarship beyond the more traditional Scholarship of Discovery is essential; although it is also important to recognize that faculty who choose to focus their efforts in the area of traditional research will be reviewed with an equitable framework for evaluation.

3. Bridging Theory to Practice

Operationalizing the Boyer model within a U.S. university presents unique opportunities and challenges. Much has been written about the uncertain nature of translating SoTL theory into effective practice (Boshier 2009; Ochoa 2011). This lack of prescription has created great opportunity for individual institutions to define its use in a way that is most consistent with the specific mission, traditions, resources and history of the school. Thus, each institution or its component colleges, can custom-tailor practice while maintaining fidelity to both the intent and theory behind the Boyer Model, especially the SoTL component. The common framework of the U.S. professoriate is three-dimensional. By identifying standards for quality teaching, service and research, the tenure track pathway is becoming clearer. Adoption of the Boyer Model assists in framing this clarity and providing options that were not discernible in the past. Crucial to promotion and tenure decisions at Niagara, is the fact that faculty members must show high levels of achievement in each of the three dimensions, with teaching becoming more critically important over the past decade. In its mission and Community Commitment, Niagara University professes that faculty have a responsibility to teach students in accordance with the following statement called the Community Commitment:

We, as the University Community of Niagara University, promise to, challenge and inspire students to think critically and creatively and to promote overall intellectual growth,

contribute to an environment in which students may develop themselves as a whole person, and

help students to recognize their place in the world and understand their responsibility to others, particularly with regard to marginalized people.

Moreover, when the scholarship of teaching is recognized as equivalent to the scholarship of discovery, teaching can be seen as both a good in itself and as the focus of a highly valued research agenda. In order to promote both instructional growth and accomplish the tasks stated in the Community Commitment above, faculty must be willing to embark on a journey as teacher/researcher, sharing findings of their own classroom experiences, collaborating with the wider University community, and recognizing avenues for continuous growth. Reciprocally, the institution must foster the potential of each person and publicly honor and promote the essence of SoTL while committing to an infrastructure of support.

Several years ago, a pertinent piece by Ochoa (2011) discussed the topics mentioned here and put the realities of SoTL into a generalized American context. She echoes the message once again that scholarship of teaching begins with the commitment to, and practice of, scholarly teaching, that it involves the systematic examination of teaching through scholarly analysis, and that dissemination of findings from those examinations to the larger educational community is paramount. As she closes that article, she makes five recommendations that are worth serious consideration by every higher education institution:

- 1. Create and support a pedagogical focus on campus that assures all persons in the teaching function have the training and support to be effective instructional leaders.
- 2. Increase the visibility of pedagogical excellence and scholarship, incorporating such into the indoctrination process for all new and future faculty, as well as promoting among senior faculty.
- 3. Contribute publically to the discussion of the scholarship of teaching.
- 4. Consider quality of teaching fully in the tenure and review process. SoTL should have EQUAL prominence with existing criterion of the professoriate.
- 5. Breed the attitude that quality pedagogy is valued as integral to a positive student experience, and reward faculty for making gains in this area.

These five general prescriptions are woven throughout the next section of the article, which demonstrates how SoTL is manifested in the daily operations of Niagara University.

4. Implementations at Niagara University

Before continuing, it is worth taking a few moments to assure a clear picture of the interrelationship between *scholarly teaching* and the *scholarship of teaching*, as the implementations that follow may represent either, or simply provide the requisite infrastructure to facilitate their pursuit.

Niagara University acknowledges the importance of both *scholarly teaching* and the *scholarship of teaching* as avenues for maximizing the student learning experience. These are similar, yet distinct in their focus and intent. "The purpose of *scholarly teaching* is to affect the activity of teaching and the resulting learning, while the *scholarship of teaching* (and learning) results in a formal, peer-reviewed communication in appropriate media or venue, which then becomes part of the knowledge base of teaching and learning" (Richlin & Cox 2004).

For example, one of the authors in her Master's degree program at Niagara studied and researched various models of cooperative learning, with the intent of employing it in her own classroom. This, an effective use of researched-based pedagogy to assist the learning of her students, represents scholarly teaching. As a result of her developing expertise, she and another of the authors created a cooperative learning model of their own which is now known by the larger educational community (through publication and workshops) as the "Dual Objective" model (Kline &Vermette 2014). This supplemental activity adds value to the body of knowledge on cooperative learning by disseminating it to others, and therefore serves as exemplar of *scholarship of teaching*. Dissemination may take a variety of forms, including publication in a peer-reviewed journal, as a case study, white paper, think piece, as conference proceedings, etc. each with the purpose of furthering the knowledge base on efficacy in teaching.

As you continue to read the entries below, ask yourself, "How does this enhance student learning" and "How does this contribute to the discipline of teaching?" Your answers provide evidence for the benefits of engaging in such scholarship.

4.1 The Center for the Advancement of Scholarship, Teaching and Learning (CASTL)

"The institution that respects and embraces SoTL, must also have a mechanism for supporting instructional growth and teaching improvement, which we see evidenced in the proliferation of teaching centers across the nation's universities (Ochoa 2011)."

Niagara's venture into systematically supporting teaching effectiveness began to take shape in earnest at the turn of the millennium. It was then that a group of faculty, who cared deeply about teaching, was provided monetary support from the institution for their first annual Conference on College Teaching. This group, that later became known as the Committee on College Teaching and Learning (CCTL), then led the initiative to promote active and integrative learning across the campus. In 2006, the committee received administrative support for their endeavors to promote quality teaching in the form of a department of Instructional Support. In 2010, NU made a strategic decision to hire a vice president of academic affairs that fully supported the Boyer Model of scholarship, understanding the positive impetus this would have on facilitating the needed cultural shift toward optimizing the student experience. In 2011, the Center for the Advancement of Scholarship, Teaching, and Learning (CASTL) was established; which solidified the institutional commitment to scholarship, teaching, and learning through providing both prime physical space and support for expanded programming.

The mission of the Center for the Advancement of Scholarship, Teaching and Learning is to provide instructional support services for faculty, which in turn, improves teaching and enhances the student learning experience. Support includes assisting face-to face and on-line professors in developing effective pedagogy through various professional development opportunities. Pursuits in this domain are often thought of as "learning from teaching," which is closely aligned with social constructivism and student-centered learning. The focus becomes sustained faculty growth and development throughout one's career.

The center assumes the role as educational change agent charged with the promotion of *scholarly teaching* as well as the *scholarship of teaching*. All workshops, Teaching and Learning Conversations, Faculty Learning Communities, consultations, and growth plans facilitated by CASTL are rooted deeply in scholarly practice. As the influence of CCTL and CASTL affect larger numbers of faculty, far more are pursuing the subsequent action of scholarship as an avenue for personal growth and/or completion of the professoriate.

CASTL offerings include on-demand tutorials, workshops and personal consultations, special events, Teaching and Learning Conversations, Faculty Learning Communities, the CCTL annual conference, CCTL active learning grants, Small Group Individual Diagnosis, Instructional Perception Analysis and the Instructional Growth Plan to cite the majors. A more complete list is described in the section that follows.

4.2 The Committee on College Teaching and Learning (CCTL)

Active learning has a long history at Niagara, but the conscious and institutionalized promotion of such is relatively recent. Early in the 1990's The Carnegie Foundation, a U.S. organization for academic policy and research, published a report aimed at improving teaching by applying the power of collaboration through shared, peer-reviewed research. NU's then vice president of academic affairs realized that Niagara University was the perfect type of institution for this approach due to its emphasis on undergraduate teaching. In the year 2000, the Committee on College Teaching and Learning was established to investigate the possibilities. The co-chaired committee today proudly boasts membership from all four colleges at Niagara, Arts and Sciences, Business Administration, Education, and Hospitality and Tourism Management. This grassroots group serves as steering committee for cultivating institutional change focused on active and integrative learning, having received robust support from three consecutive academic vice presidents. This consistency fosters internal focus on quality teaching and sends a strong message to faculty that pursuits involving scholarship of teaching at Niagara warrant serious attention and are of worth to the institution.

The CCTL committee hosts an annual international conference on active and integrative learning, which brings together nearly 150 professors, administrators, faculty developers, and students from approximately 16 different institutions. Nearly half of the presentations in 2013 were faculty from the Western New York region sharing their SoTL findings, often presenting with students and/or colleagues. The day-and-a-half long conference is host to experts in the field of teaching and learning as keynote speakers. Respected regionally as a great source of inspiration for the spring semester, proven teaching strategies are offered in

abundance and numerous SoTL projects, partnerships, and collaborations have originated as a result of networking opportunities afforded participants.

Although the annual conference is the most visible sign of the active, integrative learning culture from outside, that culture continues to develop internally. CCTL's active learning grants, designed to promote an incentive for faculty members to initiate active learning experiments in their classrooms, have become a normal part of Niagara University's culture. Serving as impetus for numerous faculty projects, these \$1000 mini-grants often fund attendance at discipline-specific state, regional and national conferences, providing a venue to share the results as scholarship of teaching and learning.

With the growth of the CCTL conference each year, and the visibility created through the active learning grants, Niagara continues to strengthen their prominence as an institution respected and recognized for quality teaching and learning.

4.3 Faculty Learning Communities (FLC's)

Work done by Milton Cox (2002) and others has resulted in the creation of Faculty Learning Communities at Niagara. These small, interdisciplinary, face-to-face groups of faculty are committed to collaboratively improving instruction. Niagara has had several over the past six years, but when Vermette became lead faculty member for 2013-2014, changes took place: a more diverse faculty was recruited (totaling 29 across all four colleges), a commitment to investigating good teaching practices was redefined, and a sense of community and strong relationships were fostered. This latter point was also exacerbated by dividing the 29 individuals into smaller cross-disciplinary teams in the spring 2014 semester to pursue common projects.

Currently the FLC does several things:

- 1. Every two weeks, a one-hour meeting provides members a chance to openly discuss instructional situations (similar to Japanese lesson study) and to share innovations and experiences from their own classes.
- 2. The FLC formally studied two of Ken Bain's famous books on higher education, (Bain 2004; 2012) using his suggestions, stories and advice as focal points for deep discussion. Much of this conversation has served as stimuli for further study and further conversation.
- 3. Finally, by breaking into numerous sub groups, a host of investigative projects were spawned for the spring semester. Some of these collaborations will make their way into print as publishable papers supported by the SoTL culture developing at NU.

The University intends to demonstrate its growing confidence in the FLC over the next few years by renewing its funding. Current data show nearly 25% of fulltime faculty at Niagara as formally engaged in actively improving instruction, surpassing 2013 projections. Continued expansion of the human base of the FLC will extend its influence to a wider swath of faculty.

4.4 Student Evaluations of Teachers (SET's)

Student evaluations of teachers, (known today as SET's), play a key role in Niagara's protocols for measuring the student learning experience. Some faculty however, doubt the validity and usefulness of such assessments, and brush them off, desperate to ignore student voice. These reservations are valid, when SET's are poorly designed, when feedback is delayed, or not provided, or when they are used as summative evaluations for administrative purpose (usually punitive). Recent work by Benton (2010), Marsh (2007), Felder and Brent (2008), all confirm however, that well designed and effectively conducted student surveys reveal important information, and that this information can indeed be used to improve teaching. Ongoing work being done by Kline, Goacher, Aquino, Moore, Vermette (and others) at Niagara supports this notion. Both the SGID and IPA processes described below have shown solid evidence of improvements in student perceptions, engagement and achievement as a result of using SET's as measurement tools; naysayers beware!

4.4.1. Small Group Instructional Diagnosis (SGID)

The Small Group Instructional Diagnosis (Clark 1979) was originally designed to evaluate the classroom experience using formative feedback from students to help improve course quality and instructional effectiveness. Although it may be used at end of term, or as a final evaluation, it is most commonly employed formatively at midterm. To conduct the SGID, a facilitator meets with a class (usually in the absence of the professor), and gathers feedback regarding aspects of the class that they find positive as well as recommendations for change to improve the learning experience. The facilitator compiles the data and reviews the findings with the professor at a follow-up meeting, and/or in writing. The information is historical, and the process is conducted only once with a given group of students. The onus to modify practice lies within the purview of the professor. Professors often seek assistance from instructional support staff, colleagues or the lead faculty member (LFM) when considering corrective action.

4.4.2. Instructional Perception Analysis (IPA) and sustained mentoring

The Instructional Perception Analysis involves employing multiple student perception surveys, of the same class, administered as baseline, mid-plan and endpoint, to highlight areas of strength in the classroom experience and to surface areas of opportunity. The timeframe involves a minimum of two semesters but may be extended for added benefit. The focus for each professor's development is determined by the professor as "driver," assisted by "guide" and "facilitator," who are educational specialists/experts, (Aquino, Vermette 2012; 2013; Kline, Aquino & Vermette 2014). The ensuing action plan, developed collaboratively, employs sustained mentoring by the guide and facilitator to improve the quality of teaching by a content expert with limited or no previous pedagogical background.

Following are the components of the process, now referred to as the KAV model:

1. Perform structured peer observations and provide feedback following the driver-guide model (Aquino & Vermette 2013) across a semester

- 2. Design Instructional Perception Analysis survey
- 3. Administer survey to students
- 4. Analyze survey results and create recommendations for driver
- 5. Discuss Instructional Perception Analysis data and instructional recommendations with driver for consideration.
- 6. Implement changes chosen by driver
- 7. Assess effects of implementation and determine next steps
- 8. Repeat steps 3-7 until driver is pleased with all data outcomes of interest. A minimum of three surveys are needed to serve as baseline, mid-plan and endpoint analyses.

In the above model, the roles of each participant are crucial to successful implementation. The guide conducts classroom observations, as well as providing pedagogical intervention aligned with survey results. The facilitator manages the process, collaborates on survey design and implementation, retrieves, interprets and manages the data, and contributes pedagogical insights complementary to those of the guide. In sustained mentoring, it is vital that all parties trust one another and that they cultivate a culture within their team of acceptance, respect and openness.

The primary differences between the above two options is their time commitment, the specificity of the data provided, and the process employed for subsequent action. The SGID is a one-time snapshot showing an overview of general class perceptions, it is administered and feedback provided generally within the equivalent of two class periods, and the ensuing change is solely owned by the professor. The IPA, as a sustained mentoring model, extends across two semesters or more, is highly structured, provides far more specific detail, and relies on the interactions between professor, guide and facilitator to direct and manage the resultant change.

Historically the use of the SGID at Niagara preceded the development of the IPA. In fact, the creation of the IPA was the result of the scholarship of teaching between two faculty members engaged in improving instructional practice (Aquino & Vermette 2013). This is a prime example of how SoTL facilitates growth and focuses organizational development.

4.5 Instructional Growth Plan (IGP)

The Instructional Growth Plan (IGP) is an action plan designed to track professional development and corresponding performance for the individual professor over time. It may employ multiple measures demonstrating progress toward completion of the professoriate or numerous other indicators of teaching and professional success. It is anticipated to serve as a clearinghouse of sorts, for faculty use in tracking personal development throughout their career. It will be diagnostic, rather than administrative in purpose and it will most likely be voluntary. Currently, the plan is in under development, mostly in conceptual stages, while individual elements are being piloted within the College of Art and Science.

4.6 Individual consultations

Individual consultations are available by appointment with CASTL staff, or informally on a drop-in basis. Popular requests involve teaching strategies, availability or use of specific resources or teaching tools, technology integration and functionality, curriculum design, assessment, classroom management, syllabus review, personalizing instruction, etc.

Although department chairs are the first line faculty resource, when questions relate to teaching, CASTL personnel are often better equipped for the role, and may be perceived as a "safer" alternative than the chair, who has administrative authority. Currently, all CASTL staff have education backgrounds, including classroom experience, which facilitates advisement.

Often consultations will begin around a technology question relating to the University Learning Management System, or incorporating technology into student coursework and lead to a deeper discussion of lesson purpose where selecting the correct technological tool for the task becomes critical (Graham 2005; Kenney 2012). This example mingles pedagogical knowledge with technological savvy, a very common combination of skills CASTL personnel rely on to provide service to faculty.

4.7 Writing retreats

In higher education, the demands of the professoriate, dictate a need for a balanced skill set enabling effective teaching, service to others, and the pursuit of scholarship. In reality however, it is not uncommon to have an imbalance in these skill sets to some degree. This may be apparent in the highly accomplished researcher and writer, whose pedagogy lacks luster, or maybe the superior teacher who struggles with academic writing. What if the two collaborated in a supportive environment designed to help both grow?

Integral to the charge of CASTL, is the expectation to assist faculty as they develop personal skills, in addition to advancing the institutional knowledge base related to the scholarship of discovery, integration, application, and teaching. The annual Walden Writing Retreat serves both purposes and satisfies challenges inherent in the act of scholarship. The retreat is an event where faculty can begin, refine, or finish articles they wish to publish. The five-day retreat includes activities intended to promote scholarship, and to create opportunities for faculty members to write and consult with experienced publishers.

4.8 Promotion and tenure workshop

Promotion and Tenure is one of the goals that all full-time tenure track faculty work toward throughout their careers. Due to the importance of this process, it is imperative that faculty members clearly understand the expectations in order to plan for such accordingly. In answer to this need, CASTL hosts a P&T workshop annually. At the workshop, the chair of the Promotion and Tenure Committee, the vice president of academic affairs and a recently-tenured faculty member clarify the importance of each element of the professoriate (teaching, scholarship, and service) providing pertinent advice on acceptable evidence of each.

4.9 New faculty orientation

Services available at an institution can be purposefully utilized only when potential users are aware of their existence. This tenet is a common foundation of wellplanned orientation programs. New faculty orientation at Niagara attempts to acclimate new faculty to crucial institutional processes, programs and facilities providing mandatory information in one eight-hour day. As the principles of active and integrative learning are deeply embedded in Niagara's mission, and educational philosophy, and these are championed through CCTL and CASTL, time is now allotted to discover CASTL during new hire orientation sessions. New faculty visit the physical space, learning about the resources, services, and meeting the staff. Although time is short, the theme of Niagara's focus on quality teaching permeates the entire day from presentations by the vice president of academic affairs, the chair of the Promotion and Tenure Committee, and the CASTL team. By the end of the first official day at Niagara University, new faculty members are very aware of the importance of teaching and learning as expressed during the hiring process and the CASTL resources at their disposal.

4.10 Professional Learning Communities (PLC's)

An outcome of the 2012 CCTL conference was the creation of a virtual Professional Learning Community (PLC), established to provide a forum for exchanging scholarly discourse related to selected books on classroom instruction and best practices in teaching. Since its creation, the PLC has grown to encompass crossinstitutional and international participation and perspectives from 13 different institutions. The PLC has three major components, the SPARK creator, the technology facilitator, and the members. The SPARK creator is an expert at artfully creating questions related to the readings that provoke and promote deep critical thinking for the discussants. The technology facilitator releases these bi-weekly to the PLC using Google Groups, managing any technology challenges, which have been few. The members are the primary discussants who respond to the SPARKs based on the readings and their classroom experience. The bi-weekly format promotes interplay between discussants, keeping the PLC active.

As can be expected, the SPARK creator is a vital role in this process and as such, the role is currently filled by the lead faculty member, Vermette. With an expert education background, Vermette facilitates the learning process, targeting the development opportunities within each reading segment. This is an important function because the discussants are all at varying levels of familiarity with effective pedagogy. Fulfilling the intended goal, most participants will experiment with and report out changes in their teaching as a result of their experience within the PLC.

4.11 On-line course design PLC – Quality Review Process

The on-line course design PLC offers faculty the opportunity to immerse themselves in an on-line class experience while gaining relevant information related to online and hybrid policy and pedagogy. The PLC is a five-week voluntary course offered three times a year. The course commences with each PLC member creating his or her own learning goals which must be approved by the facilitator. The faculty members then complete activities and readings related to foundations of course design in the on-line environment, web-based activities, institutional policies, intellectual property, Americans with Disabilities Act, and the Learning Management System (LMS). Faculty will often participate in this on-line PLC prior to having a course they teach undergo the Quality Review for On-line and Hybrid Courses. The Quality Review process conducted within each college is a process instituted to assure that all on-line classes meet uniform standards of quality delivery expected for the medium. The final assignment for the PLC includes submission of a reflection discussing how the course learning goals were met.

4.12 Teaching and Learning Conversations (TLC's)

Teaching and Learning Conversations were created by CCTL as an opportunity for faculty to come together to discuss teaching and learning in a less formal atmosphere than a workshop, but more formal than a chance encounter. The TLC topic is offered by the faculty member hosting the conversation, and is often related to personal scholarship, or best practices. This is also a venue appropriate for common challenges to be discussed and solutions discovered. Although advance registration is preferred, informal drop-ins are always welcome and participants may come and go as they please. This flexibility and informality coupled with the relaxed atmosphere of the CASTL location encourages participation and stimulates interest.

4.13 Expert workshops

Expert workshops are similar to TLC's in intent, but as workshops, there is a more formal agenda and specific planned content. This forum provides faculty the opportunity to showcase personal expertise, or to share results from scholarship endeavors. These workshops are often more technique-based, where particular strategies, pedagogical approaches, and technology use are often explored with colleagues. In addition, these have the added benefit of fostering interdepartmental and intercollegiate collaboration and exposure. Currently coordinated through CASTL as single occasion events, there may be worth in considering options for a more systematic, sustained approach to sharing personal expertise with colleagues throughout the University family (B. lannarelli, personal communication, January 20, 2014).

4.14 Faculty peer training videos

An alternative method of accessing peer expertise is through the faculty peer video library.

Created by faculty for faculty, these videos demonstrate an effective teaching strategy or technique as it is used in class. The video includes an explanation of the strategy, how it enhances student learning, and suggests how the strategy could be applied in different content areas. The videos are on an internal faculty portal accessible at any time of the day.

4.15 Teaching awards

Ochoa tells us in her recommendations for promoting the Scholarship of Teaching and Learning, that it is important for institutions dedicated to the pursuit of SoTL to cultivate the attitude that quality pedagogy is valued as integral to a positive student experience. She goes on to add that faculty making advances in this area should receive special reward as well. Niagara University has two such awards, one of which debuted last year.

The Excellence in Teaching Award hosted its inaugural presentation in1990, as a formal display of the commitment Niagara University places on teaching quality. The award is presented annually at a faculty breakfast in the fall semester. The faculty member receiving the award welcomes in the next freshman class and is an honorary member of CCTL for that academic year.

The Innovation in Teaching Award first presented in 2013, is formal recognition for those individuals who take risks in the classroom, reaping great success in student learning and classroom environment. This, like the Excellence in Teaching Award, will be presented annually.

5. In Closing

It is obvious that Niagara has grown tremendously because of its relationship with, and commitment to SoTL. It should be understood that the authors are extremely proud of this trajectory. It may not be so apparent that this "continuous improvement" mantra requires a commitment to sustained focus and hard work in order to maintain these achievements while new feats unfold.

The authors wish to close this article with three reminders for Niagara faculty and to all colleagues in universities around the globe:

- 1. Keep the original purpose and mission of higher education; the effective teaching of young people, at the center of your efforts, priorities and your commitment of resources. The paradigm has shifted and student learning should clearly be the outcome of choice everywhere.
- 2. Believe that teaching is a learned skill and is not an inherited ability; that highly effective teaching is not a direct result of earning a terminal degree; and that poor teaching does not get better with practice (repetition). However, teaching does improve with planned and individualized interventions, within a supportive and collaborative culture, and in a context that recognizes that the formal study of pedagogy is a respected form of scholarship and a legitimate advancement of the discipline.
- 3. Recognize that there are four factors of modernization that are changing the immediate future for higher education. Harsh economic realities (MOOCS, excessive tuition costs, sustained unemployment, etc.) are taking a toll, the technological revolution will continue (and present its options with glitz and great promise), the student body will become more diverse and varied in their prior knowledge, experience and skill, and the global context for institutional decision-making will expand. These four factors of modernization increase the importance of good teaching as remedy to their influence, (in both face-to-face and on-line contexts) and, by extension, promote the need for attention to the Scholarship of Teaching and Learning.

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