College Instructor Education: A Model for Effective Student Learning

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Abstract

The interconnection between teaching and learning in higher education has been the subject of academic investigation for some time. However, within the community college context, the effectiveness of pedagogically trained instructors on student learning has remained an under-examined area of scholarly research. This study advances a greater understanding regarding the importance of quality teaching within the community college system in Ontario and explores how institutional policy and practices support or impede the promotion of quality teaching.

A mixed methods sequential explanatory design was employed at a Toronto college to gauge the perspectives of participants in three sub-groups of the College strata: administrators, instructors, and students. A pragmatic approach was utilised from which multiple methods of data collection (i.e., semi-structured interviews, focus groups, and online questionnaires) were selected to exhaustively address the primary research question.

Key findings revealed that formal academic development in pedagogical education was perceived by the majority of participants as foundational to effective teaching practice and that more comprehensive academic development was needed to improve both current practice and student academic achievement. Most instructors and students concurred that learner-centred approaches, both in class and in field placements, led to a deeper level of learning. From a leadership standpoint, participants also believed that college policies and practices were misaligned with promoting quality instruction and that greater progress towards alignment was necessary; thus, there were serious leadership implications. This study adds to the current instructor education discourse by providing impetus for institutional change towards the professionalisation of college instructors and also recognises the inextricable tie between instructor education and student learning.

*Keywords***:** instructor education, pedagogy, professionalisation, college student learning, policy and practice.

Background

This paper is a portion of the findings from a doctoral study which examined the importance of quality teaching and learning within the community college context and explored how institutional policy and practices support or impede the promotion of quality teaching. The study aimed to provide practical recommendations to leaders regarding how to enhance teaching and learning within a college context. This paper provides background into trends and issues in teaching and learning in post-secondary, as well as "possibilizes" (Robertson & Webber, 2002, p. 520) opportunities that can enhance teaching and student learning.

The teaching-learning interrelationship has long been the subject of academic inquiry where direct links have been made between teaching effectiveness and student learning (Askins & Galloy, 1993; Belaineh, 2017; Gibbs & Coffey, 2004; Kagan, 2014; Loughlin, 1964; Postareff et al., 2007; Prosser, 2010; Trigwell, 2010). Yet currently in Canada, many instructors in tertiary institutions, aside from many in Education faculties, do not possess teaching credentials, nor are these mandated by institutions. Initial claims substantiating the interrelationship between professional instructor training and student learning can be found in an early study where Loughlin's (1964) conceptualisation of college faculty members having a sound pedagogical knowledge-base as a professional requisite included "adequate professional competency, that is, enough training to permit a person to undertake teaching with reasonable assurance of success" (p. 497).

In a 2017 examination of post-secondary student perceptions of 'good instructors', students identified *teaching methods* as crucial to their academic achievement (Alhija, 2017). Specifically,

imparting knowledge of the course and "teaching in a clear understandable manner" (p. 8) were highlighted as precursors to instructor effectiveness.

Even though it is clear students want effective teachers, there are few pedagogical programs for higher education instructors in Canada dedicated solely to college academics' teaching development (Carusetta & Cranton, 2009; Crookshanks, 2012; Hanson, 2013). In addition to this, there is little support and encouragement for the scholarship of teaching and learning activities in a Canadian context. Thus, with this gap in mind, this study focused on exploring the inter-relationship between college teaching, academic development, and students' academic success drawing upon the views of college teachers, students, and administrators within a large urban Canadian college. The primary research question was: How important is quality teaching and learning within the community college system and what supports are available and effective in promoting quality teaching? Students were also asked about the instructional and assessment approaches that promoted deeper learning (Prosser & Trigwell, 2014); while administrators were asked about the efficacy of academic training programs and the evaluation processes utilised to judge teaching effectiveness. All three stakeholder groups drawn from liberal studies, hospitality, health sciences, business, theatre arts, and construction and engineering technologies, were purposefully included to ensure that all major perspectives were included and valued.

A Review of Relevant Literature

Although there are many tensions surrounding effective teaching in universities, this paper presents three areas from the literature on post-secondary teaching and learning, namely, the tension between research and teaching responsibilities for academic teachers; various dimensions

in the post-secondary context related to teaching qualifications and teaching effectiveness; and factors that are increasing the demand for academic development for teaching expertise.

Tensions Between Teaching and Research Responsibilities for Academic Teachers

Unlike, K-12 teachers, post-secondary teachers have more than simply teaching within their portfolio of responsibilities. Academics usually are expected to teach, research, and undertake service or leadership within their academic community, and increasingly, service within the wider or professional community. This raises tensions about where to allocate their time and focus. In many research-orientated or research-intensive institutions, research has been the priority although several are now messaging teaching as an equal priority. Conversely, in teaching-only, comprehensive (teaching and research) institutions and colleges, research is now emerging as an increasing priority over the traditional "teaching is king" priority. Thus, most institutions, regardless of their traditional "priority" culture, are now experiencing tensions related to teaching or research priorities. In fact, a common myth in higher education is that good researchers are synonymous with effective instructors which again, reinforces the expectations for research with the implication that these academic activities will automatically result in superior teaching. A study undertaken by Prosser and his associates (2008) examined university instructors in the U.K. and Australian contexts to explore the relationship between research and teaching. They found a stronger association between research and understanding of the discipline and only a moderately strong relationship between understanding of subject matter and teaching. Furthermore, Scott and Scott (2016) found that the pervasive belief of a positive association between teaching and research responsibilities in university contexts was largely unsubstantiated, although some contend that if a nexus between research and teaching exists, that is where research findings flow back into curriculum to ensure currency and innovation, this will enhance instruction and student outcomes.

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Even so, the research-teaching nexus has also been contested (Howell, 2021; McKinley et al., 2020). It, therefore, stands to reason that subject-matter expertise gained through research alone does not adequately prepare instructors for the complexities of teaching and assessment, the diversity of students, and the variety of modes within university-level teaching. Indeed, effective or quality teaching takes time and consistent innovation to ensure quality; however, for academics, unlike K-12 teachers, teaching is only one aspect of their role. Harland and Wald (2018) noted that many New Zealand academics must balance their teaching with their research and juggling both of these responsibilities results in compromises in teaching quality. They termed this "vanilla teaching" where the academic simply puts in enough effort on teaching to keep their administrators at bay while maximizing their available time for research. Consequently, in post-secondary settings, where the majority of faculty members are not required to possess any formal education in pedagogical studies before embarking on a teaching career, there is a devaluing of 'teaching' roles in the academy over the more valued 'research' activities (Kanuka et al., 2020) which creates conflicts related to teaching in terms of available time, teaching knowledge and skill, priorities and values tensions, rewards and recognition (Bolt et al., 2016; de Jonghe, 2005; Nelson, 2008; Scott & Scott, 2016; Subbaye, 2018).

Teaching Qualifications and Effective Teaching

Throughout the literature is a pervasive connection made between effective teaching, teaching effectiveness, and formal preparation for teaching undertaken before professional practice begins (Jensen, 2011; Postareff et al., 2007, 2008; Tryggvason, 2009). Additionally, the essentiality of formal education in teaching and a professional teaching philosophy is well documented in primary and secondary education but not so much in tertiary settings (Darling-Hammond, 2000; Darling-Hammond & Youngs, 2002; Jensen, 2011; Postareff et al., 2007).

There are lessons to be learned from the K-12 sector; Darling-Hammond and Youngs (2002) found that formal teacher education was a strong indicator of higher student achievement. In their large-scale investigation, results revealed that K-12 teachers who were uncertified had less impact on student learning. Noteworthy is their distinction between certification and teacher knowledge:

> Certification is, of course, only a proxy for the real variables of interest that pertain to teachers' knowledge and skills. These include knowledge of the subject matter content to be taught and knowledge of how to teach that content to a wide range of learners, as well as the ability to manage a classroom, design and implement instruction. (p. 23)

Further support for initial teacher education was reported in Finland where a major shift in public policy led to a landmark transformation in K-12 teacher education. Government educational reforms mandated teacher preparation programs be restructured to include changes in structure and content wherein the program encompassed didactical and pedagogical theories within a research orientation. Reforms also included a year of discipline content courses and a cyclical examination of theory-practice/practice-theory. These reforms resulted in quantifiable increases in student achievement in the Finnish school system (Tryggvason, 2009). This would appear to support the premise that teacher education that included instruction, as well as discipline expertise and a nexus between theory and practice, has positive influences on student outcomes. Thus, the parallel may be that without teaching knowledge or instructional and assessment strategies college teachers may have less impact on student learning even if they have significant discipline knowledge. Indeed, concerns with teaching quality in post-secondary institutions across the United Kingdom, and potential deleterious impacts on rankings and institutional reputation on the world stage, resulted

in the U.K. government establishing a quality assurance agency, the Higher Education Academy, which recommended the establishment of mandated teacher training for all faculty members. The Post-Graduate Certificate of Teaching in Higher Education sometimes called the Post-Graduate Certificate of Academic Practice, is required, however, the impacts of this education process are varied with some indicating significant differences in teacher beliefs and attitudes, and skills (Butcher & Stoncel, 2012; Chadha, 2015), while others indicated this training may not actually influence teaching behaviours due to faculty members' lack of time, opportunity, or capacity (Bolt et al., 2016; Geschwind & Broström, 2015; Hilary, 2008).

While instructional experience and formal teaching qualifications are not ubiquitous requisites in college hiring criteria, some studies have evidenced a strong link between instructor education and the quality of their practice (Zaritsky & Toce, 2006). In the case of Kings College in London, graduate teaching assistants (GTAs) were surveyed on their perceptions of their Graduate Certificate in Academic Practice (GCAP) program. Participants reported an increased instructional knowledge base and the necessary practical skills to confidently teach their classes. The ability to enact the tenets of a student-centred approach and outcomes-based learning were core to their pedagogical repertoire (Chadha, 2015). In a similar study in teaching-led universities in the U.K., faculty members who had undertaken the Post-Graduate Certificate in Higher Education demonstrated a greater depth and breadth with respect to their instructional skills. Particularly, participants noted more confidence in "teaching approaches; a shift to learner-centred conceptualisations; practice reflectivity and cross-institutional dialogue as a catalyst for personal change" (Butcher & Stoncel, 2012, p. 158). While these investigations show positive links between instructional education and enhanced practice, Kanuka and Smith (2019) found that some Canadian heads of departments did not value teaching qualifications when it came to decisions

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related to employment, tenure, and promotion. So why are colleges not hiring 'teaching-qualified' instructors when they can make a difference to student outcomes?

Other inquiries shed light on the interrelationship among professional instructor education, pedagogy, and instructor confidence (Jensen, 2011; Postareff et al., 2007, 2008). In a comparative study of both high school and post-secondary teachers, it was found that teachers without teacher education qualifications gained considerable professional confidence with experience, which they equated to teacher effectiveness. In conflating teacher confidence with effectiveness, Jensen (2011) indicated these were false correlates as participants made no substantial change in their teaching approaches, therefore, teaching effectiveness, as it pertained to student outcomes, were never accurately measured. Without an explicit assessment of their teaching effectiveness, post-secondary teachers in this group based their assumptions of student learning on subjective interpretations rather than on objective measures. Therefore, without including students' perspectives in studies related to teaching effectiveness it is possible and even probable that academics' views of their own effectiveness may not align closely with that of students' views of effectiveness. Jensen's study also posited the importance of academic development to enhance teaching effectiveness in influencing university students' learning.

While research indicates a need for instructor education as praxis, other studies have questioned whether instructor pedagogical education is a necessary precursor for effective teaching and learning (Lueddeke, 2003; Smith & Gillespie, 2007; Zhang et al., 2013). In the literature reviewed, McCoy and Milkman's (2010) study showed no significant difference between professors who had been formally educated in pedagogy to those who had not. However, a notable limitation was that the study was small-scale and restricted to doctoral graduates in the U.S.

Another study found that teacher cognitive and verbal ability and content knowledge have a greater impact on student achievement and that there may be little difference between the effectiveness of non-certified and certified teachers (U.S. Department of Education, 2002). Likewise, a large-scale inquiry in the United Kingdom synthesised the findings from the National Student Survey (NNS) and concluded that there was little research to support the notion that pedagogical preparation significantly contributes to student satisfaction (Bell & Brooks, 2016). It should be noted that this study was limited to university students, so the opinions of community college graduates were not captured. In addition, the race of instructors was also a variable that was correlated to student satisfaction where non-white faculty members received less favourable student satisfaction ratings. This would mean that further examination would be needed to determine how much race impacts student responses. The aforementioned studies present a false dichotomy between preparation in teaching and student learning when this is a complex relationship. While research to the contrary exists, the majority of studies completed in the area of post-secondary teaching lend credence to the fact that there is an inextricable link between instructor education, teaching effectiveness, and student achievement (Prosser, 2010; Trigwell & Prosser, 2003; Trigwell & Shale, 2004).

Community College Teacher Education

As this review pertains to the factors that affect college student learning, the community college setting of teacher education has been given separate attention. Many studies conflate college and university teaching and learning into "post-secondary" as a research area, and while there are generalised similarities, there are also a number of unique characteristics specific to college teaching. A key difference between universities and colleges is that universities tend to focus on the *academic* versus *vocational* in the college context. Even though the ubiquitous

practice of employing non-formally trained instructors is common to both contexts, literature on community college pedagogical teacher education remains scant.

Evidence from the post-secondary sector supports the need for pedagogically educated college instructors. In North America, there is an increased demand from both local and international students for a college education (Alexander et al., 2012; Trends in Maritime Education, 2007). In the U.S., this college market reflects a 30% growth in population due to what Vohryzek-Bolden (2000, p. 18) terms "tidal wave 11" (i.e., children of baby boomers). Similarly, Canada's college sector has experienced over 20% increase in registrations along with a rise in international student enrolments (Trends in Maritime Education, 2007). In addition to increased enrolments, many institutions are also finding increased diversity in their student body which includes ranges in educational, linguistic, racial, ethnic, religious, intellectual, physical, as well as financial backgrounds. This diversity presents greater complexity for instructors in supporting the varied, complex, and individual learning needs of their students. Along with these forms of diversity, the demands from students and employers for cutting-edge technologically-mediated learning environments means that many instructors are having to up-skill their technology-facilitated teaching approaches. This seismic shift in pedagogy was never so glaring as in recent years of the Pandemic where globally, all learning institutions transitioned to online working and learning contexts.

These demands have increased the focus on the quality of education delivered within colleges. In an attempt to address this problem, select U.S. universities have created certificate programs for college instructors; for example, Loyola University in partnership with City Colleges Chicago developed the Community College Learning and Teaching (CCLT) certificate program

(Haworth & Wilkin, 2004). Others developed a Master of Education degree (M.Ed.) in college teaching (Alexander et al., 2012). Alexander and associates (2012) identified the importance of teaching qualifications where they reported 54% of North Carolina college teachers possessed a master's degree and 38.5% held undergraduate degrees *in their discipline*, and yet none had completed professional teaching programs (p. 850). Programs like the M. Ed and CCLT fit the technical requirements of instructor roles, and these graduate programs also helped to elevate the status of community college teaching. Once teaching qualifications increased, instructor status did as well. Instructors went from "status-less" to more respected in their field. Even so, the lack of requirement for a teaching qualification in many institutions within the higher education sector remains an issue, and many institutions still lack expert academics as well as instructor education programs (Twombly & Townsend, 2008; Vohryzek-Bolden, 2000). Hence, the post-secondary sector, specifically the college sub-section, needs more qualified instructors and pedagogical education programs for their faculty members.

These aforementioned challenges highlight the need for colleges to hire teachers who are well-qualified to meet these diversity and technology dimensions. Therefore, college instructor education programs must encompass teaching strategies that overtly address student diversity (in all its forms) and learning technology innovations.

Clearly, teaching and learning in post-secondary is a complex and multi-layered topic with many contributing and triggering factors. Three of the major dimensions reviewed in this literature review included: the tensions between research and teaching not only in terms of competing priorities but also in how these are recognised and rewarded (Dixon & Scott, 2008; Ramsden, 2003; Wright, 2010). Second, unlike most K-12 sectors that mandate a teaching qualification,

many post-secondary sectors do not, which creates a knowledge and expertise gap for university and college instructors. There is compelling research that indicates that academic development in pedagogies and assessment strategies can have positive influences on student outcomes. Third, we examined some significant differences between the college and university settings in relation to their major functions, priorities, and employment expectations, thus, highlighting the importance of this research within a college setting.

Methodology

This study utilised a mixed methods approach, specifically an explanatory sequential design to develop themes that could inform pragmatic recommendations for enhancing practice (Creswell & Guetterman, 2019). Mixed methods included questionnaires and interviews with college administrators, instructors, and students and represented multiple disciplines including 1) Languages and Communication; 2) Humanities and Science; 3) Access Programs; and 4) Academic Success. These areas were all departments in the Multidisciplinary Studies division in diploma or certificate programs in a large urban community college in Toronto. Stratified sampling (Cohen et al., 2018), which entailed a random selection of participants from different levels in the organisation, was utilised to ensure a sampling of the key stakeholders involved in teaching and learning, that is, leaders who shape the institution's policies, academic development approaches, and reward structures; instructors who engage in teaching, curriculum and assessment design, and academic development; and students who are the learners and recipients of the teaching approaches. This enabled a 360-degree insight into teaching and learning perspectives within this college context. The participating leaders were from the Office(s) of Teaching and Learning Advancement (OTLA) and Student Life. Of the 111 participants who were invited to participate in the study, 45 completed a questionnaire and 30 participated in semi-structured interviews and

focus groups. There were two phases of data collection. In phase one online questionnaires (see Table 1) were administered to all participants (N=45). The qualitative component included individual interviews and focus groups with all stakeholder groups.

Quantitative Component – An Online Questionnaire

There were three questionnaires designed for each stakeholder group using Johnson and Christensen's (2008) questionnaire design principles; each questionnaire aligned with the overall research questions and ensured that comparisons could be made between each group. Each questionnaire included a demographic section, while the second section addressed student satisfaction with learning and teaching, experience with each stakeholder group respectively (i.e., for students – their experiences with instructors, for instructors – their experiences with students, etc.) the criteria for effective and ineffective teaching, and college supports for teaching and learning.

Table 1

Questionnaire Response Rates

Participant Group	Number of Invitations Sent Out	Completed Online Questionnaires (M – Male & F – Female)	Response Rate
Faculty members	75	25 (5M, 20F)	33%
Students	30	15 (2M, 13F)	50%
Administrators	6	5 (3M, 2F)	83%
Total	111	45 (10M & 35F)	41%

Qualitative Instrument: Interviews and Focus Groups

Faculty members and administrators all undertook individual interviews, while the option was provided to students to participate in either a focus group or an interview. Three focus groups were conducted with approximately three students in each. The semi-structured interview schedules were piloted with representatives of each stakeholder group who were not participants in the study (Denzin & Lincoln, 2018; Patton, 2015). Interviews explored participants' opinions on effective teaching and learning including institutional constraints and supports; instructor education and development; and evaluation and assessment approaches. Students' interviews focused on their learning, the quality of teaching at the college, and their opinions on assessment practices. Administrator interviews aligned with all three related to their constructs of effective teaching and learning and explored the alignment of the college's institutional vision and practice as it pertained to instruction and academic success.

Table 2

Interview Response Rates

Participant Group	Participants who Indicated Interest	Completed Interviews/Focus Groups (M – Male & F – Female)	Response Rate
Faculty members	15	14 (4M, 10F)	93%
Students	14	12 (2M, 12F)	86%
Administrators (2 chairs & 2 directors)	4	4 (2M, 2F)	100%
Total	33	30 (7M, 23F)	91%

Interview participants were drawn from those who had participated in the questionnaires. Overall, 91% of respondents who completed the questionnaires indicated an interest in participating in the second phase of the study. Administrators represented the highest level of participation at 100% followed by faculty members at 93% (see Table 2), and students at 86%. Thirty individuals participated in interviews with significantly more females than males comprising this group. Administrators were the only group with an even split of two male and two female participants. Interestingly, there was also an equal representation of chairs (2) and directors (2).

Analysis

The quantitative data, namely the questionnaires, were processed using MS Excel, and analysis included descriptive statistics including frequencies and percentages of each group and cross-group comparisons. Iterative thematic coding was utilised to code the open-ended questions from which broader themes were identified. The qualitative data were quantified or "quantitized", following Onwuegbuzie's and his colleagues (2011) "conversion" legitimation approaches, where qualitative data is converted to quantifiable priorities (p. 1256). In alignment with the explanatory sequential design, the questionnaire preceded the interviews which enabled questionnaire trends to be explored in the interviews. Even so, a QUAL-quan design was adopted which indicated that the qualitative themes were given priority over the quantitative data. Consequently, the data was triangulated which included independent and cross-over analyses (Onwuegbuzie et al., 2010) to analyse the various data sets which led to a stronger thematic interpretation of both the stakeholder groups and the two instruments and enabled the merging of qualitative and quantitative data where applicable and appropriate (Miles et al., 2020).

Five major themes emerged which included various criteria that consisted of effective teaching and learning; Factors that inform college teaching practice; instructor development; instructional approaches that enhance student learning; and institutional supports of effective teaching and learning.

Findings

Effective Teaching and Learning

All participants agreed that effective teaching was crucial for successful learning. As a result, four main criteria emerged related to this theme: 1) multiple instructional approaches; 2) a learner-focused pedagogy; 3) pedagogically informed instructors; and 4) instructor affective factors. The first criterion centred on multiple instructional approaches related to instructors' repertoire of teaching and assessment strategies which maintained student interest, and engagement, and supported the learning of students with varied learning needs. Secondly, learner-focused pedagogies and approaches placed the learner as the centre of the instructors' priorities and demonstrated that the instructor genuinely cared about students. The third criterion, pedagogically informed instruction, was linked to the need for training and development for faculty members to understand teaching and develop their practice. Lastly, the fourth criterion, instructor affective factors from students' perspectives related to instructor affability, approachability, open-mindedness and caring about student achievement, whereas, for instructors, this included demonstrating compassion, flexibility, open-mindedness, respect, and non-judgment. Administrators perceived affective factors as linked to passion for their subject, wanting to share their knowledge, and a desire to be an effective educator.

Factors that Inform College Teaching Practice

This emerged as the overt linkage of "instructional preparation" and "affective factors of teaching faculty". There was consensus amongst the faculty members that pedagogical training was "super important" and included in-service training but more importantly preservice training so that instructors were set up for success rather than a deficit approach of fixing poor practice through in-service workshops. Preparation was described as a formal qualification in teaching, rather than workshops or short training programs, although many wanted in-service workshops as well.

Instructor Development

Instructor development revealed specific detail regarding the types of academic development that participants deemed to be useful in supporting teaching effectiveness. Participants cited academic development; communities of practice; the scholarship of teaching, and administrative leadership all as informing instructional practice. Peer collaborations were noted as elemental to augmenting teaching practice when the relationships were either reciprocal between colleagues with similar levels of experience or mentoring between junior and senior faculty members. The scholarship of teaching to participants involved formal master's or doctoral programs in education that included evidenced-based pedagogies and action research. Administrative leadership related to leaders' efforts to shape curriculum, develop sound materials, and successfully lead large contingents of sessional instructors on an ongoing basis. Administrators perceived nurturing and encouragement as key to their role in enhancing teaching.

Instructional Approaches that Enhance Student Learning

Instructional approaches that were impactful on student learning included: student-centred pedagogy which encompassed the establishment of learning communities, peer coaching and peer

teaching, reflective assessments, and reflective practice, as well as one-on-one feedback for deeper engagement and learning. Authentic assessments where cohorts of learners were assessed on the application of a set of specific skills were also cited as crucial. Faculty members emphasised the importance of using student feedback to refine their teaching practice.

Institutional Supports of Effective Teaching and Learning

The student group reported college external supports in the form of access to lawyers, nurses, computers, and financial aid as indirectly or positively impacting their learning. Academics and administrators believed that the college's vision statement supported efforts toward enhancing teaching and learning but did not put in place adequate financing or staffing to this end. Academics felt the college made an effort to support teaching and learning at a micro level through professional development, tuition reimbursements, and assistance from the Teaching and Learning Centre to promote quality teaching; however, while most indicated efforts were sincere, the majority believed these provisions were cursory and insufficient. One key issue was the College's overreliance on sessional faculty members which meant that they were not investing in full-time faculty members' development of teaching capacity. Administrators indicated the College's vision was excellent but the resourcing to make the vision a reality was insufficient.
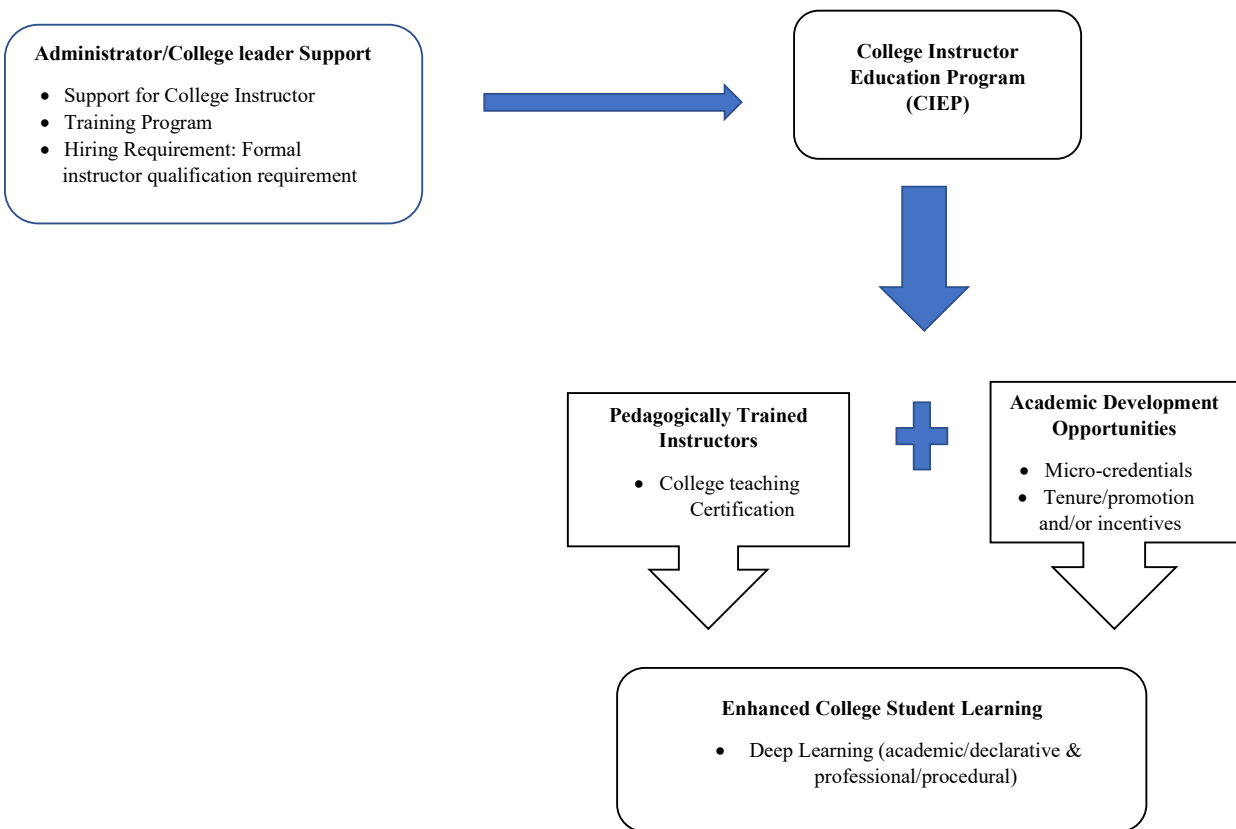
Discussion and Recommendations

The findings from this study led to the development of the College Instructor Education (CIE) model (see Figure 1) designed to enhance teaching and learning in a college context through a multifaceted approach. The CIE Model recommends faculty members having a teaching certification that would then lead to optimal student learning. It outlines the need for support from administrators and college leaders who would include recognition and rewards for this certification

process with tenure and promotion. This CIE Model also highlights the need to increase the number of faculty members who invest in their teaching skill set and thus improve the institution's reputation via quality educational processes. The following recommendations discuss the linkages between the model, the literature and other research findings, and this study's findings.

Figure 1

Model for Enhancing the Quality of Teaching and Learning in Colleges

Administrator/College leader Support

- Support for College Instructor
- Training Program
- Hiring Requirement: Formal instructor qualification requirement

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College Instructor Education Program (CIEP)

Pedagogically Trained Instructors

- College teaching Certification

+

Academic Development Opportunities

- Micro-credentials
- Tenure/promotion and/or incentives

Enhanced College Student Learning

- Deep Learning (academic/declarative & professional/procedural)

Model for Enhancing the Quality of Teaching and Learning in Colleges (EQTLC)

The *Model for Enhancing the Quality of Teaching and Learning in Colleges* (EQTLC) (Figure 1) emerged from the findings in this study and has been conceptualised as a means to enhance the professionalisation of college teaching faculty members, specifically as it relates to their instructional role. Findings indicated that a formal instructor education program for college

faculty members need to be established for instructional approaches across disciplines to be better aligned with learner-focused pedagogies. The EQTLC model is presented as a graphic and demonstrates the integral interconnection between administrators, faculty members, and students, and their vital roles in the establishment of an instructor certification program, and an academic development program, designed to improve the quality of instruction and student learning.

College Instructor Education Program (CIEP)

The CIEP presents two pathways, one for novice or aspiring instructors and a second for experienced instructors who desire to improve and innovate their practice for greater success with students. Central to the model is the provision of pedagogical education and certification to those intending to enter the field of community college teaching, as well as micro-credentialing certificates for those currently in the field.

The Certification Program.

For novice or aspiring instructors, a concurrent program is proposed that intertwines pedagogical coursework that includes a nexus of relevant, innovative theory and instructional and assessment strategies alongside college classroom observations, in concert with a supervised and mentored field placement (i.e., a teaching practicum within the college setting). Within the field placement component, participants would become student instructors wherein they are mentored by an experienced and skilled faculty member (i.e., a faculty member who has demonstrated innovative, learner-centred practices). Authentic assessment would also need to be modelled in this program and would include assessments within the practical real-world settings of the field placements.

The Academic Development Micro-credentialling Courses.

The second pathway includes academic development (AD) in the way of micro-credentialling courses that would consist of both theory and pragmatic components, as well as learner-centred approaches premised on adult learning theory and practices suitable for the college context. However, this would be at an advanced level to that of the certification program given that participants would be experienced instructors. Authentic assessment would also be a key assessment approach which would be pivotal to innovating teaching and learning.

This second pathway addresses the findings of this study where faculty members desired AD that was pitched at the appropriate level for their development. When AD does not meet the participants' needs or is not at an appropriate level of their current understanding or stage of practice, dissatisfaction results (Avidov-Ungar, 2016; Hamblin, 2015; Behar-Horenstein et al., 2008; Tawalbeh, 2015). With this in mind, these AD opportunities would need to provide content and facilitation that recognised participants' experience and advanced teaching capacities. Providing a range of AD would offer greater choice than the certification program.

Findings from the literature emphasised that instructors engaged in AD if: a) they possessed an innate passion for their profession, and therefore, an intrinsic need to improve their skillset; b) the development opportunity addressed gaps in their instruction; c) there were monetary or professional rewards; and d) the process was recursive and allowed for collective reflection (peer coaching) and in turn, application of new practices (Avidov-Ungar, 2016; Tawalbeh, 2015). In the case of AD for online instructors, one study revealed a positive association between AD that was unique to online instructors and their levels of professional competence (Storandt et al., 2012). Storandt highlighted that AD for online instructors should be separated from face-to-face

instructors' AD to ensure that it was tailored to the uniqueness and specificity of virtual delivery. With the experience of COVID-19, this aspect has become even more pertinent. Furthermore, Storandt showed that institutional investment in AD sustained over a period of time, which also includes a dialogic and reflective component, aligns with the processes advocated for in the EQTLC model. While incentives for AD were ubiquitous in the literature (Herman, 2012; Leibowitz et al., 2014; McLean et al., 2008), these were not cited as a motivating factor for engagement by participants in this study; however, workload and time constraints were mentioned as impediments to engaging in AD.

While the opportunity to gain micro-credentials in college instruction would be time-consuming, the EQTLC Model proposes a staged approach to gaining these credentials, and it is recommended that there are incentives incorporated to promote genuine engagement and completion. Findings indicated that key incentives were reported as tenure, promotion, and recognition and this endorsed the literature on how these incentives encouraged quality teaching (Smyth, 2017).

Key Processes in the CIEP

Core to both programs the CIEP is the establishment of learning communities where learning occurs in collaboration with others within cohort groups. This collaborative approach would serve several different purposes: 1) it would provide a networking opportunity so that new faculty members can develop supportive collegial relationships, 2) collaboration should provide opportunities to jointly develop and share resources and teaching materials which would reduce the overall workload in developing innovative strategies and assessments, and this is crucial for time-poor experienced academics, and 3) would provide opportunities to engage in peer coaching

where implementation of innovative strategies could be encouraged and would generate idea sharing and supportive approaches. Additionally, critical reflective strategies, based on Mezirow's work on enhancing cognition and deep learning, would encourage transformative learning and promote the integration of innovation into regular practice (Cranton, 2002).

Cranton (2002) broadly described reflective strategies as teaching learners to identify disorienting dilemmas; critically examine their assumptions; be open to alternate perspectives; engage openly in discourse; and in turn, act on their revised assumptions. Another aspect of the CIEP would be to overtly incorporate a problem-solving dimension. This would combine the previously mentioned collaborations and reflective practice, and enable participants to consider tensions, dilemmas, and critical incidents that can and do arise in the college classroom. Consequently, introducing reflective practice as an expectation of all "good" instructors would be a key element to promoting professionalism and a growth mindset as an instructor.

Thus, the processes for both pathways in the CIEP, that is, the certification and the academic development micro-credentialing programs, would embody learning good practice through modelling and experience within the program. The touchstones of instructional and assessment practices would be informed by the foundational principles within the literature (e.g., Chickering & Gamson, 1991; Prosser & Trigwell, 1999; Ramsden, 2003; Scott, 2015; Scott & Scott, 2012). The key difference between the two programs would be that the first would be set at a foundational level whereas the academic program would provide a wider range of more advanced strategies and approaches.

Administrator and Leader Support

Establishing a CIEP can only be actualised once there is strong support from college leaders. This is a necessary precursor to ensuring that elevated student outcomes occur. By making instructor certification and micro-credentialing a mandate in the hiring and ongoing performance reviews of faculty members, college teaching will be perceived as a professional and skilled career with a specific educational knowledge base, rather than simply discipline-oriented based on instructor expertise and/or experiential background. However, systemic challenges prevail in implementing teaching-and-learning-focused programs. As noted in the findings, while most participants viewed instructor pedagogical education as a crucial requirement for all faculty members, not all administrators agreed with this premise. To address this contention, the EQTLC model identifies the importance of college administrator support as foundational to the establishment of a CIEP.

College Leader Support: Aligning Policy with Practice.

To ensure the viability of a teaching program, it would be required for college leaders to commit adequate funding and staffing through institutional policy and practice frameworks. This would legitimatize these programs as an important institutional priority. Other college systemic issues, such as an over-reliance on sessional faculty, could be addressed by establishing this EQTLC Model in conjunction with allocating appropriate funding for an increase in full-time instructors.

Balancing Hiring of Full-Time Faculty vs Sessionals. College funding decisions need to be re-examined in terms of increasing the number of full-time faculty members rather than employing sessional instructors. As the findings revealed, current hiring favours a heavy reliance

on sessional staff as a cost-saving measure; however, little investment is made into the development and enhancement of sessional staff teaching capacities (McComb & Eather, 2021). As a result, the core of academic responsibilities for curriculum renewal and ongoing AD falls on the shrinking pool of full-time faculty members. Hiring full-time faculty will, in turn, allow them more time for engagement in AD, thereby investing in quality teaching and learning, curriculum leadership, and committees and service, as these full-time faculty members would be investing in their teaching and career success. These are the covert advantages of investing in full-time faculty members as opposed to the short-term financial gains of hiring cheaper sessional instructors where there is no expectation to engage in the many unpaid and sometimes unrecognised leadership and service work that is imperative to the institution. As the EQTCL model is consistently implemented and learner-centred instructional and assessment practices become the norm, there will be a need to also review the hiring criteria so that all faculty members, incoming and current, have a unified approach to the college's learner-centred priorities.

Considering Funding Infrastructure. Another systemic contention is the need for more funding for infrastructure changes; that is, ensuring there is allotted space for an instructor education program. Additionally, if this model was to become blended or fully online, the infrastructure would be reliant on technology support. For example, there would be the need to move the training opportunities into the online space, with supports from IT experts and instructional designers. It would be important to ensure all new faculty have access and are comfortable with current learning management systems. Naturally, this aspect would require some consideration of funding allocations which would need support from administrators.

Conclusion

This study explored college instructors', students', and administrators' perspectives related to the importance of quality teaching and learning within the college setting, and also examined what supports were available and effective in promoting quality teaching. This mixed methods study revealed four major findings: stakeholders' criteria for effective teaching; factors that inform college practice; instructor development; and institutional supports for effective teaching and learning.

While there was some consensus regarding the *criteria for effective teaching* there were also role-specific differences. All agreed that effective teaching was important and desirable and resultantly, four major sub-themes emerged 1) multiple instructional approaches; 2) a learner-focused pedagogy; 3) pedagogically-informed instructors; and 4) instructor affective factors. How these influenced or were translated varied across the different stakeholder groups.

Instructor development was perceived as important by all but was greatly emphasised by instructors and administrators. These included the development of instructional strategies, the importance of preparation prior to commencing their career, and the pivotal importance of an instructor's affective qualities, such as respect, affability, approachability, and open-mindedness in relation to student interactions and relationships. In addition, specific approaches to AD included AD programs, communities of practice, the scholarship of teaching and learning, and supportive administrators.

Instructional approaches that enhance student learning included a range of strategies that included but are not limited to: learning communities, peer coaching and peer teaching, reflective

assessments and practice, one-on-one feedback for deeper engagement and learning, and authentic assessments.

Institutional supports for teaching and learning varied according to stakeholder groups. Curiously, students cited access to lawyers, nurses, computers, and financial aid; whereas, faculty members indicated AD, tuition reimbursements for pedagogical programs, and assistance from Teaching and Learning centres. Administrators reported that the College's vision provided clear direction, but greater resources were needed to make the vision a reality.

The model for *Enhancing the Quality of Teaching and Learning in Colleges* (EQTLC) emerged from this study and is designed to present a holistic approach to enhancing the quality of teaching and learning through a systematic, purposeful, and recognised approach to academic development. The model includes two pathways that recognize the differences in learning needs across the spectrum of early-career to experienced college teacher. Key recommendations for administrators on how to resource and support this Model with the view to enhancing the college's reputation for high-quality teaching and learning were also included. These included: 1) mandating certification/credentialing program to encourage and incentivize incoming and established faculty to engage; 2) aligning policy with practice by ensuring alignment between hiring criteria and learner-centred approaches; 3) funding instructor education programs; 4) hiring more full-time faculty rather than sessional instructors as this is an investment in quality teaching, curriculum development, leadership and service activities; 5) funding infrastructure to ensure there are appropriate classrooms and AD spaces; and 6) funding and supporting online AD for online teaching faculty members, with supports from IT experts and instructional designers. All of these

recommendations are part of the holistic approach to enhancing the quality of teaching and learning in colleges.

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