

Professional Development for Adjunct Teaching Faculty in a Research-Intensive University: Engagement in Scholarly Approaches to Teaching and Learning

Andrea S. Webb, Tracy J. Wong, and Harry T. Hubball
The University of British Columbia

Research-intensive universities around the world are increasingly drawing upon leading practitioners in professional fields as adjunct faculty to deliver high quality student learning experiences in diverse undergraduate and graduate program contexts. To support effective professional development in these contexts, many universities have developed flexible and responsive initiatives in order to meet the specific needs and circumstances of adjunct teaching faculty. However, very little has been documented about these initiatives. This paper is a reflective examination of the development and impact of strategic professional development initiatives for field practitioners in the Faculties of Education and Dentistry at The University of British Columbia (UBC), Canada. Our experiences suggest that professional development programs designed to meet the specific needs and circumstances of adjunct teaching faculty can enhance scholarly approaches to university teaching and learning practices. Specifically, strategically led, situated and flexible communities of practice (e.g., mentoring, post-teaching reflective debriefs, blended and distance learning professional development opportunities) were critical supports for engaging adjunct teaching faculty in research-informed and inquiry-based pedagogical methods (e.g., learning-centered assessment practices, peer review).

Research-intensive universities around the world are increasingly drawing upon leading practitioners in professional fields as adjunct faculty to deliver high quality student learning experiences in diverse undergraduate and graduate program contexts (Arai et al., 2007; Ehrenberg, 2012; Marshall, Orell, Cameron, Bosanquet, & Thomas, 2011). Adjunct teaching faculty in professional programs provide the applied benefits of being immersed in the realities of practice, offer unique and rich insights to expertise and experience from the field, build valuable community partnerships with the university, and offer a cost-effective resource (from volunteer contributions to modest stipends and/or secondments) while freeing up many faculty members for research endeavors. However, the incorporation of field practitioners, as adjunct teaching faculty, into research-intensive universities can create challenges.

Due to complex contractual teaching workloads and/or limited time available (outside of assigned teaching duties) to engage in university professional development initiatives, adjunct teaching faculty are often unaware of institutional and discipline-specific structures (e.g., academic cultures, specific graduate attributes and accreditation standards, program renewal developments) that shape program-level teaching and learning practices (Peters & Boylston, 2006). Furthermore, while field practitioners, as well as many novice full-time faculty, recognize the importance of best practices, they often adopt traditional methods of instruction (e.g., teacher-driven, skills-based orientation), that they themselves have experienced as university students (Boyd & Harris, 2010; Hendricson et al., 2007; Roth, 2007). These approaches to instruction are rarely focused on technology-enabled, research-informed and inquiry-based methodologies to

engage university students in critical thinking, responsible use of ethical principles, research skills and self-directed learning for the rigors of academic and continual professional practice (Albino et al., 2008; Ambrose et al., 2010). In response to these scholarly and professional challenges, many research-intensive universities have developed flexible and responsive professional development programs to meet the specific needs and circumstances of adjunct teaching faculty though very little has been documented about these initiatives (Saunders, Trowler, & Bamber, 2011; Steinert et al., 2006). This paper is a reflective examination of the development and impact of strategic professional development initiatives for field practitioners in the Faculties of Dentistry and Education at The University of British Columbia (UBC), Canada.

Context

As a research-intensive university, UBC offers degree programs through 12 faculties and 14 schools (see <http://www.ubc.ca/>). Professional programs, such as those in the Faculties of Dentistry and Education, employ adjunct teaching faculty, in these cases clinical practitioner-instructors and master (K-12) classroom teachers, to deliver substantive portions of their degree programs.

Dentistry

The Faculty of Dentistry offers a pre-doctoral dental program that spans four years of professional study and leads to the degree of Doctor of Dental Medicine (DMD). The curriculum is developed around a core framework of dental competencies (University of British Columbia, 2006) and is delivered through a hybrid of

problem-based, lecture, laboratory and clinical learning experiences. The competency-based framework consists of six broad domains of professional activity and responsibilities related to the general practice of dentistry: professionalism; practice organization; assessment of the patient and the oral environment; health promotion; establishment and maintenance of a healthy oral environment; and rehabilitation of form, function, and esthetics. All patient care in pediatric clinical settings is supervised by a group of 25 clinical practitioner-instructors. Most clinical practitioner-instructors are pediatric specialists or general practitioners from the community who typically teach one half day per week as adjunct teaching faculty in this program (Wong & Hubball, 2011). Two are full-time tenure-track faculty and three are graduate students training to be specialists in pediatric dentistry.

Education

The teacher education program, within the UBC Faculty of Education, is a one-year post-degree program that leads to a bachelor of education (BEd) degree. The curriculum is designed to meet the professional needs and responsibilities for new teachers (UBC Teacher Education Office, 2012), and is focused around eight provincially mandated standards (British Columbia Teacher Regulation Branch, 2012). The curriculum is delivered through a combination of inquiry-based course work, lectures, and practical teaching experiences in British Columbia public school settings. A substantive portion of this BEd program is taught by adjunct teaching faculty who are seconded to the university for three to five days a week for up to three years in duration. For example, the teacher candidates are instructed and supervised by adjunct teaching professors in both teaching methodology courses as well as school practicum experiences.

Field Practitioners as Adjunct Faculty: Contributions and Challenges

The critical contributions of field practitioners within these programs provide valuable professional expertise and practical experience from the community to enhance student learning in these respective fields of dentistry and education. Field practitioners also demonstrate a deep knowledge of the practical context and are experienced with the required professional standards, a diversity of knowledge that cannot be found in one department or unit of full-time academics. Moreover, well-supported and high quality teaching experiences in this research-intensive environment benefit the field practitioners themselves, the profession as a whole, and the overall university-profession partnership agenda (Avakian, 1995; Green, 2007).

Heavy contractual teaching workloads and/or limited time available (outside of assigned teaching duties), however, typically create significant challenges for these field practitioners to engage in essential professional development (e.g., orientation to institutional and discipline-specific academic context, development of research-informed and inquiry-based learning, and assessment methodologies for university-level students). In response to these scholarly and professional challenges, flexible and responsive professional development initiatives were implemented in order to meet the specific needs and circumstances of adjunct teaching faculty in this research-intensive setting. These professional development initiatives focused on supporting unique communities of practice through technology-enabled, research-informed, and inquiry-based approaches to university teaching and learning.

Theoretical Underpinnings

For the most part, contracted adjunct teaching faculty around the world are assigned specific course-based teaching duties and work in relative isolation to the academic milieu of the university (Hendricson et al., 2007; Steinert et al., 2006). Despite an abundance of available literature on best educational practices and professional development initiatives that are typically offered by university teaching and learning centers, there is little opportunity (structured or informal) for adjunct teaching faculty to share experiences, investigate, and embrace contemporary approaches to curriculum and pedagogy with other colleagues in the immediacy of their own discipline and program settings in which they teach (Lydon & King, 2009; Vaughan, 2004). Based on our research and practical experiences with adjunct teaching faculty in a Canadian research-intensive university setting, we believe there are two fundamental principles in order to meet adjunct teaching faculty's specific professional development needs and circumstances. It needs to be situated in a flexible community of practice and should focus on a scholarly approach to teaching and learning (Barr & Tagg, 1995; Hansman, 2001; Hubball, Clarke, & Poole, 2010; Wenger, McDermott, & Snyder, 2002).

Situated in a Flexible Community of Practice

The situated component of a community of practice speaks to the importance of professional identity, as well as the unique discipline-specific nature required for adjunct teaching faculty's professional development in a research-intensive university setting (Duncombe & Armoura, 2004; Hendricson et al., 2007; Lave & Wenger, 1991). An emphasis on the flexible component of a community of practice relates to the complex and multifaceted realities of adjunct teaching faculty

professional lives which therefore necessitates far greater ease of access to professional development supports (Peters & Boylston, 2006). Essentially, a situated and flexible community of practice for adjunct teaching faculty is responsive to their professional development needs and circumstances in a research-intensive university setting (Bryk, Gomez, & Grunow, 2011). Specifically, it builds on and acknowledges the existing strengths and expertise of experienced practitioners. It also recognizes that the scholarly and professional interactions with colleagues help create cohesion, teamwork and a sense of shared understanding, and exploration for effective teaching and learning methods. As well, careful scheduling and the strategic use of educational technology (e.g., e-mail, PDF readings, websites, podcast demonstrations, online discussion forums) enable greater flexibility for adjunct teaching faculty to engage in blended and/or distance professional development initiatives.

Despite important contributions to the educational mission, contractual teaching responsibilities of adjunct teaching faculty typically situate them on the periphery of the core academic (research, teaching, and service contributions) function of a research-intensive university (Roth, 2007). A situated and flexible community of practice for professional development thus promotes feelings of inclusion, respect, and support for adjunct teaching faculty's contributions, as well as provides a unique and effective forum to discuss key institutional and discipline-specific issues shaping contemporary approaches to teaching and learning in a research-intensive university (Fagen-Wilen, Springer, Ambrosino, & White, 2006; Huber, 2006). However, a situated and flexible community of practice for adjunct teaching faculty's professional development does not just happen in a research-intensive university environment. In addition to individual group member commitments, it requires effective leadership, strategic coordination, and resources to engage adjunct teaching faculty in scholarly approaches to teaching and learning.

Scholarly Approaches to Teaching and Learning

Adjunct teaching faculty have often been removed from higher education environments for some time and, like many novice full-time faculty, may be unaware of contemporary approaches to teaching and learning in a research-intensive university (Boyd & Harris, 2010; Hendricson et al., 2007). Consistent with the academic ethos of these institutions around the world, a scholarly approach to teaching and learning is informed by the research literature, methodological rigor, and evidence-based approaches for best educational practices (Boyer, 1990; Glassick, Huber, & Maeroff, 1997; Hutchings, Huber, & Ciccone, 2010).

Globally in higher education, there has been a gradual shift from traditional teacher-directed teaching practices (e.g., lecture, mid-term, and final exam) to teaching students how to learn the subject and develop higher order thinking skills (Ambrose et al., 2010; Barr & Tagg, 1995). Universities around the world are re-imagining their goals and plans for education to prepare career-ready independent thinkers and engaged citizens. First introduced by Ernest Boyer (1990) in a North American context, the scholarship of teaching and learning (SoTL) sought to make teaching in higher education a scholarly enterprise by recognizing its dynamism and demonstrating a more inclusive view of what it means to be a scholar in higher education. Derived from educational theory and practice, SoTL is key to developing responsive and integrated curricula through pedagogical content knowledge, deftly combining expertise in a discipline and knowledge of how to teach. SoTL internalizes theory and practice through a systematic and cyclical process of inquiry to reflect on and initiate positive changes to pedagogical practices (Cousin, 2009; Minotta, 2010).

A scholarly approach to teaching and learning is key for effective professional development in a research-intensive university. Adjunct teaching faculty professional development initiatives should be grounded in educational theory and practice (e.g., prepare faculty for understanding program reform, focus on a shift in culture to developing self-directed learners and critical thinkers, and prepare faculty on how to assess learning) and mindful of the disciplinary context in which they operate (Kanuka, 2011; Licari, 2007). Training in scholarly approaches to teaching and learning, therefore, does take time and commitment by the institution, academic units, and individual faculty members. Further, it should be recognized that engaging adjunct teaching faculty in scholarly approaches to teaching and learning encroaches on their time and energies devoted to students' learning and/or might be perceived as coerced participation for both faculty and students (Hutchings, 2003; MacLean & Poole, 2010). Therefore, discussions on the ethical challenges and effective use of scholarly approaches to teaching and learning are part of an ongoing debate in research-intensive universities. Building on these principles, the following sections reflect on the implementation experiences of strategic professional development initiatives for adjunct teaching faculty in the UBC Faculties of Dentistry and Education.

Professional Development Initiatives

The two principles outlined were applied in diverse (semi-structured and structured immersion programs) ways in order to meet the professional development needs and circumstances of adjunct

teaching faculty in the Faculties of Dentistry and Education in a research-intensive university.

Dentistry

In the Faculty of Dentistry, professional development for clinical practitioner-instructors was provided as part of a pilot project to investigate effective supports for authentic assessment for these valued contributors to the pediatric dentistry program (Wong, 2012). Clinical practitioner-instructors ($n = 13$; i.e., half of the cohort) were interviewed by the Program Coordinator of the UBC Children's Dental Program to explore the nature and scope of their assessment practices and reflect on how they understand their practice in the clinical educational settings of pediatric dentistry at UBC. The Program Coordinator then observed clinical practitioner-instructors in situ with attention to observing their assessment and evaluation practices. Formative feedback was provided and took place in verbal one-to-one consultations, informally but regularly, during busy clinic sessions throughout an academic term. Multiple, in-depth discussions were necessary when clinical practitioner-instructors encountered significant assessment challenges (e.g., student exhibiting poor professional behavior). Clinical practitioner-instructors were encouraged to continually assess progress of students by providing feedback based on evidence of students' clinical work (Redwood, Winning, Lekkas, & Townsend, 2010; Wong, 2012). They were also asked to evaluate students' clinical competency using a holistic rubric that considered broader situational factors such as professionalism; application of knowledge; clinical skills; and organization, time management, and infection control (University of British Columbia, 2011).

For many clinical practitioner-instructors, the concept of evidence-based approaches for best educational practices was new. Despite traditional assessment practices, clinical practitioner-instructors increasingly acknowledged the need for authentic assessment to be focused on students' overall performance during patient care, not just technical skills. They were introduced to the literature on competency-based dental education and the importance of their role in developing students who are prepared to enter independent practice (Albino et al., 2008; Licari, 2007).

It is worthwhile to note that, while the majority of participants in the pilot project were adjunct faculty, a minority was comprised of full-time tenure-track faculty and graduate students in a clinical pediatric dentistry specialty program. After analyzing the data collected, findings were consistent across groups of instructors. Themes and patterns of instructional

practice were similar; on rare occasions, student assessment was informed by educational research. The tendency was for clinical practitioner instructors to teach using traditional methods typical of their clinical settings (e.g., a teacher-driven, skills-based orientation).

A flexible community of practice for professional development evolved in this dentistry context for clinical practitioner-instructors. This occurred as a result of their unique professional identities, their limited access on campus, lack of recognition of formalized professional development in dental education, as well as their diverse backgrounds, strengths, and limitations for teaching in a research-intensive university. With mentoring and reflective debriefing opportunities, collectively and individually, clinical practitioner-instructors, in varying degrees, were engaged in learning-centered assessment methods. These included techniques to collect feedback to improve their own teaching (e.g., one-minute papers). Active learning and reflection strategies played a key role in developing collegial interaction amongst the clinical practitioner-instructors (e.g., immediate case-based scenarios, peer-to-peer interaction, debrief of critical incidents) and enhancing scholarly approaches to teaching and learning.

The use of learning technologies enhanced a flexible community of practice with these clinical practitioner-instructors. First, e-mail provided a critical communication tool to correspond with and bond individual clinical practitioner-instructors as a group. Second, learning technologies helped them easily access important assessment and evaluation tools and materials, such as the Axium online assessment instrument, UBC Dentistry's Intranet website, the Blackboard Vista learning system, and recorded instructional podcasts. Professional development in this dental education setting for clinical practitioner-instructors has thus focused around semi-structured and in situ discussions (strategically led by a trained coordinator) in a flexible community of practice.

Education

The UBC Faculty Certificate Program on Teaching and Learning in Higher Education (<http://ctl.t.ubc.ca/about-isotl/programs-events/faculty-sotl-program/>) was established in 1998 and has since graduated over 300 faculty members from Canadian and international universities. The program focuses on scholarly approaches to university teaching and learning (Hubball et al., 2010). By adapting this program, a specific program cohort was designed for 11 master (K-12) schoolteachers who were hired in September 2009 as new adjunct teaching faculty in the UBC teacher education program; the cohort included one of the

authors as a member and one as an instructor. Taking into account their professional identities, diverse backgrounds, interests, strengths and limitations for teaching in a research-intensive university, a flexible community of practice was operationalized. Carefully scheduled and coordinated were monthly lunch-hour cohort meetings (before and after daily teaching assignments) and a series of collaborative and independent on-site classroom-based professional development assignments (e.g., peer review and mentoring of teaching experiences) guided by a core set of responsive program-level learning outcomes.

Monthly cohort meetings over a 2-year period focused on a series of discussions around innovative teaching practices, specific classroom challenges, and sequential topics and readings pertaining to scholarly approaches to teaching and learning (e.g., inquiry-based teaching and learning methodologies, student engagement, formative peer review, assessment and evaluation, learning technologies). An initial entry point and orientation for cohort discussions centered on the institutional and discipline-specific context for teaching and learning (e.g., UBC's Place and Promise visioning document, professional standards required by teacher candidates), as well as key terms and academic jargon (e.g., learning-centered curricula and scholarly approaches to teaching and learning) commonly used in this university environment (Chickering & Gamson, 1987; Chism, 2007; Peters & Boylston, 2006; Steinert et al., 2006). The use of a learning management system, Web CT Vista, provided additional support for adjunct teaching faculty to access useful teaching and learning materials, on-site professional development assignments, readings, video recordings and podcasts of presentations, and discussion forums. A professional portfolio, consisting of seven on-site teaching and learning assignments (e.g., monthly reflections, peer review of teaching, and classroom research project), provided the medium to demonstrate professional development learning outcomes. A certificate of completion was designed to enhance motivation, a sense of purpose and accomplishment for university-level professional development, as well as recognition by the institution and for use at the adjunct teaching faculty member's professional body.

Reflections: Lessons Learned

Programs designed for the Faculties of Dentistry and Education at UBC provide an opportunity for investigation of, and meeting, the professional development needs of adjunct faculty. A flexible community of practice focusing on a scholarly approach to teaching and learning can create an

environment where adjunct faculty can discuss student learning and reflect upon their teaching practice.

Adjunct teaching faculty who are expert practitioners in the field do not necessarily translate to expert teachers in a research-intensive university environment. Professional development is critical. Evidence suggested that more had to be done to support and assist adjunct teaching faculty with relevant professional development. This evidence included typically low levels of attendance in university-wide professional development initiatives, along with mixed degrees of quality for teaching and student learning experiences in these disciplines at UBC (e.g., over-reliance on transmission teaching methods at the expense of research-informed and inquiry-based learning methodologies, tenuous connections between individual course-based teaching practices and integration of program-level learning outcomes). Our research and practical experiences with adjunct teaching faculty suggest that to engage (rather than marginalize and disengage) adjunct teaching faculty in scholarly approaches to teaching and learning require purpose-built professional development initiatives strategically designed and coordinated in order to meet their specific needs and circumstances. For example, developing a situated and flexible community of practice was a critical support for engaging adjunct teaching faculty in scholarly approaches to teaching and learning. Connections with peers helped to inspire and prevent professional isolation, as well as build resilience for inevitable classroom/clinical practice challenges that would otherwise have negatively impacted teaching, student learning experiences, and sustained university/profession partnerships.

Essentially, adjunct teaching faculty engaged in professional development in different ways. They were at different starting points in scholarly approaches to teaching and learning, progressed at different rates, and expended differing levels of energy into it (Ambrose et al., 2010). Most, due to complex workloads, needed longer and more flexible options to engage. Utilization of technology, in blended or distance learning formats, greatly assisted the connectedness in and access to professional development opportunities in these settings. Despite closer community connections within the university and with each other, adjunct teaching faculty remained more strongly connected with their professional contexts rather than the research and academic contexts of their university colleagues. A few felt that their first priority at the university was as an instructor and therefore did not prioritize professional development. Further, complex contractual teaching assignments at UBC and

alternative work commitments for some made full attendance and completion of required professional tasks difficult.

While many challenges and areas for improvement still remain, there are encouraging trends of change:

- indications of high level engagement in adjunct teaching faculty professional development initiatives,
- enhanced quality of teaching (through demonstrable professional development portfolio outcomes) and student learning experiences (e.g., learning-centered course design and assessment practices),
- increased leadership and contributions toward program-level discussions,
- increased enrollments in further graduate level study for the scholarship of teaching, and
- far-reaching effects on classroom/clinical practices on both campus and field settings in these disciplines at UBC.

We are still learning and trust that the progress made to date will provide a strong theoretical and practical foundation for adjunct teaching faculty professional development initiatives into the future. Further plans to enhance these professional development initiatives include: using adjunct teaching faculty graduates to mentor and share innovative teaching and learning methods with new practitioner-instructors; increasing the provision of flexible distance learning modules on scholarly approaches to teaching and learning; and using an e-portfolio software (rather than hard copy binder format) for adjunct teaching faculty professional development portfolios.

Summary

This paper is a reflective examination of the development and impact of strategic professional development initiatives for field practitioners in two different professional programs at a Canadian research-intensive university. Theoretical underpinnings, strategies, and challenges associated with these initiatives have been discussed. Our experiences suggest that professional development programs that are designed to meet the specific needs and circumstances of adjunct teaching faculty can enhance scholarly approaches to university teaching and learning practices. Specifically, strategically led, situated, and flexible communities of practice (e.g., mentoring, post-teaching reflective debriefs, blended and distance learning professional development opportunities) were critical supports for engaging adjunct teaching faculty in research-informed and inquiry-based pedagogical methods (e.g., learning-centered assessment practices and peer review). While

there are still many challenges and areas for improvement, there are encouraging signs. Increased engagement in professional development, along with institutional and discipline-specific supports, is likely to enhance the contributions of field practitioners to the educational mission of this research-intensive university.

References

- Albino, J. E. N., Young, S. K., Neumann, L. M., Kramer, G. A., Andrieu, S. C., Henson, L., . . . Hendricson, W. D. (2008). Assessing dental students' competence: Best practice recommendations in the performance assessment literature and investigation of current practices in predoctoral dental education. *Journal of Dental Education*, 72, 1405-1435. Retrieved from <http://www.jdentaled.org/content/72/12/1405.full.pdf+html>
- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., Norman, M. K., & Mayer, R. E. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.
- Arai, K., Cech, T., Chameau, J.-L., Horn, P., Mattai, I., Potocnik, J., & Wiley, J. (2007). The future of research universities. Is the model of research-intensive universities still valid at the beginning of the twenty-first century? *European Molecular Biology Organization Reports*, 8(9), 804-810. doi:10.1038/sj.embor.7401052
- Avakian, A. N. (1995). Conflicting demands for adjunct faculty. *Community College Journal*, 65(6), 34-35.
- Barr, R. B., & Tagg, J. (1995). From teaching to learning: A new paradigm for undergraduate education. *Change*, 27(6), 12-26. doi:10.1080/00091383.1995.10544672
- Boyd, P., & Harris, K. (2010). Becoming a university lecturer in teacher education: Expert school teachers reconstructing their pedagogy and identity. *Professional Development in Education*, 36(1-2), 9-24. doi:10.1080/19415250903454767
- British Columbia Teacher Regulation Branch. (2012). *Current standards*. Retrieved from <http://www.bcteacherregulation.ca/Standards/StandardsDevelopment.aspx>
- Bryk, A. S., Gomez, L. M., & Grunow, A. (2011). *Getting ideas into action: Building networked improvement communities in education*. Retrieved from http://rd.carnegiefoundation.org/wp-content/uploads/2011/05/bryk-gomez_building-nics-education.pdf
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(7), 3-7.
- Chism, N. V. (2007). *Peer review of teaching: A sourcebook* (2nd ed.). Bolton, MA: Anker.
- Cousin, G. (2009). *Strategies for researching learning in higher education: An introduction to contemporary methods and approaches*. London, UK: Routledge.
- Duncombe, R., & Armoura, K. M. (2004). Collaborative professional learning: From theory to practice. *Professional Development in Education*, 30(1), 141-166.
- Ehrenberg, R. G. (2012). American higher education in transition. *Journal of Economic Perspectives*, 26(1), 193-216. doi:10.1080/13674580400200230
- Fagen-Wilen, R., Springer, D. W., Ambrosino, R., & White, B. W. (2006). The support of Adjunct Faculty: An academic imperative. *Social Work Education*, 25(1), 39-51. doi:10.1080/02615470500477870
- Glassick, C. E., Huber, M. T., & Maeroff, G. I. (1997). *Scholarship assessed: Evaluation of the professoriate*. San Francisco, CA: Jossey-Bass.
- Green, D. W. (2007). Adjunct faculty and the continuing quest for quality. *New Directions for Community College*, 140, 29-39. doi:10.1002/cc.302
- Hansman, C. A. (2001). Context based adult learning. *New Directions for Adult and Continuing Education*, 89, 43-51. doi:10.1002/ace.7
- Hendricson, W. D., Anderson, E., Andrieu, S. C., Chadwick, D. G., Cole, J. R., George, M. C., . . . Young, S. K. (2007). Does faculty development enhance teaching effectiveness? *Journal of Dental Education*, 71, 1513-1533.
- Hubball, H., Clarke, A., & Poole, G. (2010). Ten-year reflections on mentoring SoTL research in a research-intensive university. *International Journal for Academic Development*, 15(2), 117-129. doi:10.1080/13601441003737758
- Huber, M. T. (2006). Disciplines, pedagogy, and inquiry-based learning about teaching. In C. Kreber (Ed.), *Exploring research-based teaching, new directions for teaching and learning* (No. 107, pp. 63-72). San Francisco, CA: Jossey-Bass.
- Hutchings, P. (2003). Competing goods: Ethical issues in the scholarship of teaching and learning. *Change*, 35(5), 26-33. doi:10.1080/00091380309604116
- Hutchings, P., Huber, M., & Ciccone, A. (2011). *The scholarship of teaching and learning reconsidered: Institutional integration and impact*. San Francisco, CA: Jossey-Bass.
- Kanuka, H. (2011). Keeping the scholarship in the scholarship of teaching and learning. *International Journal for the Scholarship of Teaching and Learning*, 5(1). Retrieved from http://academics.georgiasouthern.edu/ijsofl/v5n1/invited_essays/PDFs/_Kanuka.pdf
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York, NY: Cambridge University Press.
- Licari, F. W. (2007). Faculty development to support curriculum change and ensure the future vitality of dental education. *Journal of Dental Education*, 71, 1509-1512. Retrieved from <http://www.jdentaled.org/content/71/12/1509.full.pdf+html>
- Lydon, S., & King, C. (2009). Can a single, short continuing professional development workshop cause change in the classroom? *Professional Development in Education*, 35(1), 63-82. doi:10.1080/13674580802264746
- MacLean, M., & Poole, G. (2010). An introduction to ethical considerations for novices to research in teaching and learning in Canada. *Canadian Journal for the Scholarship of Teaching and Learning*, 1(2). doi:10.5206/cjsotl-rcacea.2010.2.7
- Marshall, S. J., Orell, J., Cameron, A., Bosanquet, A., & Thomas, S. (2011). Leading and managing learning and teaching in higher education. *Higher Education Research & Development*, 30(2), 87-103. doi:10.1080/07294360.2010.512631
- Minotta, M. (2010). Reflective teaching as self-directed professional development: Building practical or work-related knowledge. *Professional Development in Education*, 36(1-2), 325-338. doi:10.1080/19415250903457547
- Peters, M. A., & Boylston, M. (2006). Mentoring adjunct faculty: Innovative solutions. *Nurse Educator*, 31(2), 61-64.
- Redwood, C., Winning, T., Lekkas, D., & Townsend, G. (2010). Improving clinical assessment: Evaluating students' ability to identify and apply clinical criteria. *European Journal of Dental Education*, 14, 136-144. doi:10.1111/j.1600-0579.2009.00606.x
- Roth, K. (2007). Dental education: A leadership challenge for dental educators and practitioners. *Journal of Dental Education*, 71, 983-987. Retrieved from <http://www.jdentaled.org/content/71/8/983.full.pdf>
- Saunders, M., Trowler, P., & Bamber, V. (Eds.). (2011). *Reconceptualising evaluation in higher education: The practice turn*. Berkshire, UK: McGraw-Hill.
- Steinert, Y., Mann K., Centeno, A., Dolmans, D., Spencer, J., Gelula, M., & Prideaux, D. (2006). A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME guide No. 8. *Medical Teacher*, 28, 497-526. doi:10.1080/01421590600902976

- University of British Columbia. (2006). *UBC Dentistry competencies for the new practitioner*. Retrieved from <https://secure.dentistry.ubc.ca/intranet/academicprograms/dmd/UBCCompetencyDocument.pdf>
- University of British Columbia. (2011). *Integrated clinical care (ICC) syllabus: Patient care performance rubric*. Retrieved from https://secure.dentistry.ubc.ca/intranet/icc_manual/documents/2011/AppendixII-PatientCarePerformanceRubric.pdf
- University of British Columbia Teacher Education Office. (2012). *Mission for teacher education at UBC*. Retrieved from <http://teach.educ.ubc.ca/about/mission.html>
- Vaughan, N. (2004). Technology in support of faculty learning communities. *New Directions for Teaching and Learning*, 97, 101-109. doi:10.1002/tl.137
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School Press.
- Wong, T. J. (2012). Assessment and evaluation practices in a pediatric dentistry clinical education setting (Master's thesis). Retrieved from https://circle.ubc.ca/bitstream/handle/2429/42778/ubc_2012_fall_wong_tracy.pdf?sequence=6
- Wong, T. J., & Hubball, H. T. (2011). Examination of curriculum reform in a four-year program of pediatric dentistry. *Transformative Dialogues Journal*, 5(1). Retrieved from http://kwantlen.ca/TD/TD.5.1/TD.5.1.8_Wong&Hubball_Examination_of_Curriculum_Reform.pdf
-
- ANDREA S. WEBB is a PhD student in the Department of Curriculum and Pedagogy, Faculty of Education, at the University of British Columbia.
- TRACY J. WONG, DMD, is a clinical assistant professor in the Faculty of Dentistry at the University of British Columbia, Vancouver, Canada.
- HARRY T. HUBBALL is an associate professor in the Department of Curriculum and Pedagogy, Faculty of Education at the University of British Columbia. Harry is a 3M National Teaching Fellow and the academic program director for the UBC Faculty SoTL Leadership Program: Certificate on Teaching and Learning in Higher Education.

Acknowledgements

The authors of this paper would like to express their sincere thanks to field practitioners' and colleagues in the Faculties of Dentistry and Education for their critical contributions to these professional development initiatives.