#### NOTES FROM THE FIELD / NOTES DU TERRAIN

# A REFLECTION ON MY EXPERIENCES ENGAGING TEACHERS IN PROFESSIONAL DEVELOPMENT ON THE INTEGRATION OF TECHNOLOGY INTO THEIR PRACTICE

TOM FULLERTON McGill University

ABSTRACT. This piece is an autobiographical reflection on practice. Models of professional development are reviewed based on personal experience in the field working with practicing teachers in a variety of capacities. A case is made for teacher inquiry as a model for sustained professional improvement over time that is personally meaningful and potentially transformative. The reader is invited to consider how education technology leaders can leverage the potential of connected classrooms by transforming teacher practice.

### IMPLIQUER LES ENSEIGNANTS DANS UN PROCESSUS DE DÉVELOPPEMENT PROFES-SIONNEL VISANT À INTÉGRER LES TECHNOLOGIES DANS LEUR PRATIQUE: RÉFLEXIONS SUR MON EXPÉRIENCE

**RÉSUMÉ**. Ce texte est une réflexion autobiographique sur une de mes expériences pratiques. Des modèles de développement professionnel sont examinés sur la base de mon expérience sur le terrain auprès d'enseignants possédant des habiletés diverses. Je suggère que les recherches menées par des enseignants constituent un modèle de développement professionnel durable à long terme, puisque authentique pour l'individu et potentiellement transformateur. Le lecteur est invité à réfléchir aux manières dont les leaders technologiques peuvent maximiser le potentiel de classes branchées, en transformant la pratique enseignante.

Practice may not be the right word. That would imply that I knew how to do it and that I was trying to get better at it by repeatedly acting and reflecting. In fact, I had no idea when I set out on this journey where it would take me nor did I know how to do the work I was attempting, or even what the "it" was. My sincere hope is that I will say the same thing in another 10 years. Being open to the experience, adopting an ethnographic approach, has allowed me to see trends as they emerged and as I was able to integrate them into my practice.

#### INSTRUCTIONAL COACHING

I was able to find work immediately upon graduation in the Anglophone school system in Quebec because I was proficient with technology and could teach in French. I had an area of specialization coupled with interests and competency that ranged from early primary to secondary robotics. The Lester B. Pearson School Board was still hiring teachers who could manage computer labs and as a result I was able to secure a temporary and then a tenure-track position. As instructional time should be spent on reportable subjects and be in line with the curriculum, I worked with classroom teachers to integrate as much as possible what we were doing in the lab with what they were teaching in their classrooms. We had various models of support through the years. At one time, teachers came with their students to the lab and we co-taught the lesson. This allowed some of the teachers to learn new technology skills alongside their students. At other times, I kept students in their classrooms so we could plan media productions and would have a parent volunteer in the lab ready to get groups going as they were ready.

I found the coaching model ineffective in transforming classroom practice over time. I was very excited by the promise of technology to support student learning, even with the early Apple II computers, but most classroom teachers did not share my excitement. The model was not more effective by the time we had a mobile lab of ibooks. The technological advancements in hardware and software, network improvements and mobility did not increase integration.

#### CENTRALIZED TRAINING AND RESOURCES: DECENTRALIZED SUPPORT

One year the board implemented a "train the trainer" model in which 2 or 3 teachers were brought to the board for centralized training, given a Smartboard and a laptop, and asked to bring their knowledge back to their schools. These teachers became the pedagogical-technological (ped-tech) leaders in their schools. I joined the program and hosted sessions at my school. This was a good networking opportunity for me, but there was little gain in moving teacher practice forward. Not all teachers who participated felt comfortable sharing and there was not enough buy-in from non-participating classroom teachers.

I accepted a contract with the Ministry of Education to work with the Quebec English Schools Network, which later became LEARN Quebec. I had the opportunity to work with passionate educators from across the province, documenting examples of practice and publishing them to the web. I gave workshops to small Anglophone schools spread out across the province. We worked together with the board-level ICT consultants to build workshops which they could then deliver in their districts. This was a very exciting time and the team I was working with was (and still is) an amazingly talented group. My hope in working there was that we could create centralized resources that would be available for teachers across the province (and beyond) via the inter-

net. We created curricular materials for the Anglophone schools and consulted on the development of Concordia's Learning Toolkit (which included the eportfolio tool ePEARL). As pedagogically sound as the materials we created were, and as engaging as the workshops we gave were, I did not feel we were having the effect we could. I expected that there would be more interest on the part of classroom teachers, and yet what I found was that many of them were still recreating materials in their classrooms, adapted to their contexts and students.

#### BUILDING SCHOOL-BASED TEAMS

I returned to the classroom for a short time until I was hired as the ICT consultant for Lester B. Pearson. I was hopeful that in that position I would be able to work towards a more consistent integration of technology districtwide. I invited school-based technology teams that included an administrator and the ped-tech teacher leaders referred to earlier to a centralized meeting. I asked each of the teams to create a vision for the integration of technology at their school or centre. They were provided with international standards to use as a reference (http://www.iste.org/standards), were asked to identify their own needs and challenges and propose ways in which they would support the integration of technology. They returned to their schools to present their plans, prioritize and strategize, and then submitted the plans to Educational Services. Technology funding for the purchase of hardware and professional development was contingent on a clearly articulated plan. We would help them move their staff forward but not without a plan. In some cases, administrators invited me in to help them craft their plans. It was here that I started to adopt an inquiry-oriented approach to learning with adults. I had been teaching with an inquiry-oriented approach to learning with my students but found that with technology, teachers expected to be told what to do. It had felt like training and as such, less than satisfying. I began to ask more questions than I answered. What are you trying to do or what problem are you having? What have you tried so far? I shifted the burden of teaching from me to a shared responsibility for learning. I changed my workshops from a stand and deliver model to conversations and explorations with teachers. Instead of explicitly teaching them the technical skills, I gave them tasks and had them work together to explore the new technology. This did frustrate some teachers who wanted quick answers, but it helped to build capacity as I helped them to troubleshoot on their own, to learn how to use the technology more independently.

## ENGAGING TEACHERS IN AN INQUIRY-ORIENTED APPROACH TO PROFESSIONAL DEVELOPMENT

I began working with these school teams, meeting regularly with them and discussing their plans, consulting on technology integration but also talking about learning - teacher learning and student learning. These conversations spilled over into the classrooms where I worked with teachers more closely. One such teacher I connected with was a passionate secondary English teacher who I'll call "Mary." She had been to a Ministry workshop with me and wanted to incorporate media into her expanded understanding of text production and deconstruction. We learned together, co-planning and co-teaching. We scrounged up some old laptops, hooked up microphones and created podcasts with her class. We managed to get some cheap digital cameras and created photo stories. It did not demand any extraordinary expense and everything we did fit in with a need that Mary had identified herself. As she shared her experience with the other teachers in the English department, they asked me to come and work with them as well. This reinforced for me the power of sharing stories of practice. In sharing her experiences with me during an interview and with her colleagues, Mary deepened her reflections on her learning. Her colleagues learned from her experience and were inspired to learn how they could incorporate media into their practice and how they could help their students develop the critical media skills necessary for the Secondary 5 English exam. I returned to the school every Tuesday until it became "Tuesdays with Tom." Teachers in other subjects became interested in what was happening because the teachers themselves were creating a buzz of interest. This wasn't an initiative imposed by an external body. This was an inquiry that came from a felt tension in one teacher's practice and spread organically as other teachers developed their own questions. There was a community of support, access to resources, and a supportive administration. I trained a group of students who became techies for the school as more teachers began to integrate technology into their practice. It worked, but I should stress that it wasn't because I had created a masterful plan that it was successful in impacting the integration of technology at the school. It worked because I listened and responded to their needs. They were empowered to create a plan that made sense to them in their context. I helped them to be successful by scaffolding their technology experiences, but I did not impose my own pedagogical practice or technology interests. I used what they had or got them inexpensive or open source materials to accomplish their pedagogical goals. The work I did with one teacher rippled out beyond the high school staff to the vocational school that shared the building.

As I retell this story, I realize that this is a very thin slice over a considerable time-span. That said, these broad strokes allow me to identify some of the potential factors in supporting sustained professional development over time. Technology changes too quickly to create a static model. Unlike curricular

subjects, the unwritten curriculum of technology must adapt very quickly to new advances. The recent explosion of mobile devices is evidence of that, as is the likelihood that some of you never printed on a dot-matrix printer over an Appletalk network or saved a file to a 5 1/4 floppy disk. In order to be responsive to these advances, we need a professional development model that is itself responsive to teacher needs, in line with Provincial curriculum, informed by research and inquiry-based. This reinforces for me the value of the process. The process is the product. If we can establish learning communities in our schools in which teachers feel that they have voice, that their concerns are being heard and addressed, where they feel safe to take risks, we can build a culture of learning in schools. Bridging the artificial divide of academic research and practitioner inquiry is essential in avoiding assumptions and grounding our inquiries in sound methods, based on theory rather than opinion. Those of us in leadership positions would do well to listen more than we speak to allow underrepresented voices to be heard in the decision-making process. If we look for rich descriptions rather than quantifiable results, we will in the process help teachers articulate their learning to a wider audience, build or extend their communities and networks and thin the classroom walls.

I don't believe that these suggestions require any more resources from an already taxed system. In fact, I think they suggest that we slow down and work together to meet the challenges rather than making decisions at the top out of expediency or efficiency. Based on my reflections on practice summarized briefly here, I would suggest that if we want to effect systemic change, we would do well to involve practitioners in the decision-making process and to value and support that process.

#### **POSTSCRIPT**

While I was working with the school-based teams, I had the opportunity to interview for a Faculty Associate position with Simon Fraser University. The Field Studies department offers a Graduate Diploma to practicing teachers. These diplomas are co-constructed with district personnel to dovetail into existing professional development initiatives. During the 2-year program, teachers engage in inquiry into practice that involves self-study and an ethnographic approach to data gathering (What am I noticing? Why is it important?). They draw on research to inform their wonderings or to respond to tensions in their practice and design and implement field studies. Unlike most action research approaches in which the student is the subject of a teacher's research, we invited teachers to engage in a critical reflection on their practice through self-study. By exploring and describing who they are as teachers and learners, they uncover assumptions about their practice, identify gaps, and celebrate strengths. They are supported in their fieldwork by mentors who meet with them regularly in small groups. Mentors, sessional instructors and Faculty Associates were often graduates of the program. One of the intentions of the

Field Studies program was to build capacity in the district. Where the program was especially successful, they also had the support of instructional coaches from the district who followed teachers in their practice to help untangle the technological glitches that inevitably arose.

I had the pleasure of working with teachers engaged in inquiry for 3 years and have seen the transformative effect it can have both personally and professionally. I'm interested in gathering rich descriptions of systemic factors that support those teachers in continuing with their disposition towards inquiry in my current research.

TOM FULLERTON is a graduate student at McGill University in the Department of Integrated Studies in Education. He has worked as a classroom teacher, a Pedagogical Consultant, for the Ministère de l'Éducation, du Loisir et du Sport and taught both undergraduate and graduate students at Concordia, McGill and Simon Fraser. His current research is in the area of teacher inquiry. Tom can be contacted at tomfullerton. mcgill@gmail.com

TOM FULLERTON est étudiant à la maîtrise à l'Université McGill, au sein du département d'études intégrées en sciences de l'éducation. Il a enseigné au secondaire et a occupé le poste de conseiller pédagogique pour le Ministère de l'Éducation, du Loisir et du Sport. Il a également enseigné au premier et deuxième cycle à l'Université Concordia, l'Université McGill et l'Université Simon Fraser. Actuellement, il s'intéresse aux recherches menées par les enseignants. Il est possible de communiquer avec Tom à l'adresse suivante: tomfullerton.mcgill@gmail.com