The Slow Breath to Tenure: Unwinding the University

PATTI PENTE, CATHERINE ADAMS
University of Alberta

ABSTRACT: Can we really afford the feverish pace the post-university seems to demand of us as pre-tenured faculty? Who or what does such frenetic activity ultimately serve? Without seeking recourse in romantic nostalgia, this article documents an optimistic demarcation of new *chronotopic* sites in the academe: "slow hours," taking time for personal journal writing, creating visual poetry. We hope our "slow breaths" on our journey to tenure will stand as invitation to our community of colleagues to also regularly partake of moments that shift the instrumental demands of productivity toward the immediacy of creative process as instances of scholarly endeavors.

RESUMÉ: Nous, pré titulaires de la faculté, pouvons-nous vraiment supporter le rythme frénétique imposé par la période post-universitaire? En fin de compte, à qui ou à quoi cette ardeur effrénée, bénéficie-t'elle? Pour ne pas sombrer dans le larmoyant, cet article offre un côté optimiste à l'appui de nouveaux sites *chronotopiques* répertoriés sous la rubrique: "période de rémission" afin de prendre le temps d'écrire un journal personnel, de créer une poésie visuelle. Nous espérons que notre "prendre le temps de souffler" pour notre parcours vers la titularisation, sera perçu comme une invitation à notre communauté de collègues et aussi, pour prendre part régulièrement à des moments qui changent d'exigences techniques de productivité, à l'impact immédiat de la créativité comme exemple d'efforts universitaires.

Introduction

Within the milieu of academia, the pressure to perform with regard to publishing, student evaluation scores, awards, service, and grants can result in stressful work conditions and unhealthy pressure on new faculty. While the university recognizes these burdens and implements strategies to support new scholars, the external pressures to perform are ever increased. Much of this pressure stems from general expectations in the field. Federal granting agencies and peer-reviewed journals

Journal of Educational Thought
Vol. 44, No. 1, 2010, 117-129.

maintain this pressure. Certainly a high standard of scholarship is desirable in our work, but the *amount* of work that is expected continually increases.

In a landmark study, Harvard business professor Robert D. Austin (1996) discovered that a predictable pattern of human behavior tends to unfold in organizations that drive high performance through inflating standards of measurement. The pattern is relatively simple. When measurement schemes are first implemented, performance measures tend to increase. In this early stage, the *true* value of an organization's production is typically raised. Workers – in this case, the professoriate – strive toward modest targets by working *faster and smarter*. However, as stakes are raised and pressures increased, a dysfunctional pattern is initiated which ultimately results in sharp declines in true performance. Such pressures include instituting continuously inflating quotas, inducing competition between coworkers, and offering high-stakes incentives or punishments. Since workers have already increased their overall performance by working faster and smarter, they now respond by finding other ways to increase reported measures that may not be in keeping with the spirit of the measuring system. Here, it is the spirit of scholarship and teaching that may quietly suffer. In today's market-driven, ranking-obsessed corporate universities of excellence, the possibility of dysfunctional patterns taking root in pre-tenure academics' performances increases dramatically. Given the pervasive attitudes toward performance in the field – that scholars never have enough publications, grants, and awards – we propose a slow breath to tenure instead of the fast track.

Theoretical Framework

Our inquiry is situated in the midst of today's "post" university; an institution that Bill Readings (1996) declares in ruins and Stanley Fish (2005) dubs, without irony, a university without an idea. As new professors, we are necessarily arrived too late – yesterday's academic culture has already left the building. Today, we find ourselves flung into a post-historical University of Excellence where "the demand for published research required to get tenure and the attendant ambitions and anxieties ... turn all Ph.D. students and tenure-track assistant professors into salespeople" (Donoghue, 2008, p. 60). Dwelling in an institution in ruins, we are tasked with negotiating new meaning amid the ivory tower's smoke and rubble.

For Readings, resisting the capitalist-bureaucratic discourse of excellence through such acts as rephrasing the pedagogical scene as "sites of *obligation*, a loci of *ethical practices*" (1996, p. 154) may serve to develop an approach to accountability "that *exceeds* the logic of accounting" (p. 164). Only through such de-centering (as opposed to oppositional) stances in our teaching "can we hope to open up pedagogy, to lend it a temporality that resists commodification" (p. 165). Readings' suggestion does not intend to subterfuge the accounting logic of bureaucracy, but to remind that pedagogy "has a specific chronotope that is radically alien to the notion of accountable time upon which the excellence of capitalist-bureaucratic management and bookkeeping depend" (p. 151). Chronotopes are, as Mikhail Bakhtin (1981) describes,

> Points in the geography of a community where time and space intersect and fuse. Time takes on flesh and becomes visible for human contemplation; likewise, space becomes charged and responsive to the movements of time and history and the enduring character of a people. ... Chronotopes thus stand as monuments to the community itself, as symbols of it, as forces operating to shape its members' images of themselves. (p. 7)

Pedagogy demands temporal-spatial rhythms that thrive beyond the instrumentalist logic and notice of accounting, for example, the *kairos* time of the teachable moment. Thoughtful academic writing too requires its own devotions of time and dwellings of place.

It is within the hyper-chronetic landscape of excellence that we tarry now and wonder: can we really afford the feverish pace the post-university seems to demand of us? Who or what does such frenetic activity ultimately serve? Or perhaps there is another pace, *tempo giusto*: the right speed, moving at one's own sense of tempo for the task at-hand. *Tempo giusto* is the tempered speed advocated by the founder of the Slow Food Movement, journalist Carlo Petrini:

> Being slow means that you can control the rhythms of your own life. You decide how fast you have to go in any given context. If today I want to go fast, I go fast; if tomorrow I want to go slow, I go slow. What we are fighting for is the right to determine our own tempos. (as cited in Honoré, 2004, p. 16)

Without seeking recourse in romantic nostalgia, we wish to engage the possibilities of a "slow university" (Treaner, 2008). This manuscript documents the impetus for, as well as the optimistic demarcation of new chronotopic sites: "slow hours," taking time for a personal journal, or writing or creating visual poetry. Too, we hope it will stand as invitation

to our community of pre-tenure colleagues to also regularly partake of moments that shift the instrumental demands of productivity toward the immediacy of creative process as instances of scholarly endeavors.

Chronotope I: Penelope Unwinds

It is a basic truth of the human psyche that in order to turn the straw of our daily lives into the gold of meaning, we must each seek out the true names of those powerful, unarticulated beings that live out their stories in the depths of our personal and collective unconscious. Or as I understand Paulo Freire (1970), to *name* the world is to transform it. Then again, *un*-naming the world can work a wholly other kind of primordial, world-changing magic (le Guin, 1985).

This is the second year I have filled out a Faculty Annual Report, currently a web-based system that serves to facilitate and standardize the process of documenting an individual faculty's activities and achievements over an academic year. My annual report decides, when weighed against the reports of all my colleagues, what increment I will receive: 0.0, 0.5, 1.0, 1.5, or 2.0. There are six main categories in the report: Teaching; Research Development and Scholarly Work; Applications for Funding; Knowledge of the Discipline and Specialization; Contributions to the Department, Faculty, and University; and Contributions to Academic, Professional, and Public Service. The report is generated by filling in the multiple fields associated with each of these categories and their sub-categories.

As I work through the system, I cannot help but notice that many of the fields in my annual report remain stubbornly blank – announced by a red and bold lettered, "not entered" – leaving me worried that I have somehow fallen short. When I do fill in a field, the "Status" column turns a more soothing blue color, but it is nonetheless states: "not complete." To achieve the bright green "complete!" moniker, I must agree that this is all I have to offer in this category. But I am reluctant to commit, hoping perhaps I have forgotten something.

The first year I approached this mid-summer task of completing the annual report, I was full of hope and certainty. After all, I had a couple of peer-reviewed publications, a paper award, strong student evaluations, committee work, plus I was a co-applicant on a successful grant application. My dissertation was almost done. Yet, by the time I am done this first report, I realize – based on its poverty of bright green "complete!" fields – I am far from achieving the expected heights that

now appeared fiendishly beyond my reach. I wonder jealously what my colleagues had achieved. Have I somehow spent my time frivolously? Yet reflecting back over the year, I ask: really, what on earth I could have done differently? I toy with returning to a simpler life, where my employment felt secure, good teaching was enough, and my fledgling research aspirations were celebrated.

Penelope of Homer's *Odyssey*, weaves Laertes shroud by day, and unweaves it by night. Her act of weaving/unweaving is *mêtis*, a "cunning intelligence" akin to that of her beloved husband Odysseus, the great *polymêtis* ("much craft"). Barbara Clayton (2004) calls Penelope's web trick a form of poetics, a distinctly feminine activity handed down from goddess Athena, the daughter of Metis. Through her web *mêtis*, Penelope postpones – until just the right moment – what is apparently decreed (that she must marry one of her suitors) in favor of her heart's truth (that Odysseus is still alive despite his long absence). Of late I have come to reflect on the poetics of Penelope's unfinished tapestry, as I struggle to weave/unweave/reweave my untenured life in the academy. The gesture of weaving affirms my tether to the academy; the unweaving whispers my private testament to a different vision.

My annual report for this year is now complete, yet I feel drawn to pull it back, to untangle my handful of precious threads from their restrictive loom and weave them again otherwise. Freire (1970) has offered us an education toward freedom through *logos*, through reclaiming our right to name the world. Aesthetic expression opens another avenue to authentic speech. Such imaginative utterance springs from the lived immediacy of pre-reflective experience and insight, tempered not by template but by hard-won discipline, the everyday practices that cohere and compose our lifeworld as teachers, researchers, and academics. "What work of art is my life?" "What good, truth, and beauty do I hope to bring to this world?" These are the questions that trouble and strengthen my teacherly heart, fire my scholarly ambitions, and steady my commitment to community.

This small fistful of threads *wants* to compose a brighter, more significant tapestry. Yet, how do I fashion such a *topos*, one that reveals the *cronos* wisdom of the everyday, where "time takes on flesh, [and] space becomes charged" (Bakhtin, 1981, p. 84), and that operates to shape a renewed sense of the academy? I return to my writings, the ones I now proudly call publications. I open a familiar journal from my shelf, find my name and begin to read from the middle of the article. Deep in the text, I remember my voice. And here, in the gentle cadence of

carefully chosen words, I sense my tacit understandings still alive and quietly breathing. I close the book, open a new page and begin to weave again.

Chronotope II: Pretenured Underdrawings

Portaging Spaces
Budging friction on paper
Soundless shifts of power
Edges bend, twist, and thin,
Exposing crowds of "should haves".

Scritch, scratch, scritch, scratch, scritch, scratch,
scritch, scratch, scritch, scratch,
I hatch, float, scribble, rub,
shade, erase, smudge, stain, splotch, smear,
Shaping out the sounds of words written.

> The study of underdrawings – defined as any drawing forming the starting-point in the execution of a work of art that is completely covered during the working process ... has always been considered among the most intimate and personal of all the arts. Since the early Renaissance, a drawn sketch was central to the process of artistic creation as thoughts and images were first rendered into graphic form. Although "first idea" sketches represent only one aspect of the creative process ... idea-generating sketches possess the aura of fiery inspiration. (Schreiber Jacoby & Shelley, 2009)

I begin an underdrawing that unwinds the track of tenure to the immediacy of my gestures as the blackened tips of my fingers smudge my thoughts into the fine tooth of paper: ashen and darker slate, feral lines and phantom shadows create echoes of the world. I am reminded through this activity of the ghosts of lessons where I have learned more than I have taught. The act of communication, Reading (1996) reminds, is never transparent. Communicating through underdrawing is an act of line-making without the assumptions written into the lines of textual language, but with a different set of conditions: that the drawing has aesthetic value and that it is layered among other sets of values; moral and ethical, informing the political. Social frames usefully complicate works of art, but I am interested in the process of drawing as much as

the final result. This act and event of bodily gesture recorded onto paper is my link to the process of acquiring tenure. This underdrawing will be covered entirely by another layer in another time, emphasizing the paradoxical logic of its transitory and foundational elements.

I do not underestimate the act of drawing: it is not a way to step out of work into recreation, but rather, drawing *is* the work, for it is through creative endeavour that I teach and research. Drawing is demanding. With my actions on canvas and paper I seek my own tempo, the sound of coloured chalk and charcoal on an endless, grainy surface. A line drawn across the pressures of the job cuts quickly and beautifully through the tension of pre-tenured space. In gestural drawing as a dreaming, as a call: line, as its own echo of my breathing reaches into the past and future with simultaneity. My chronotypical lines are drawn slowly, creating spaces between. How does this make my roles as scholar, mentor, and teacher satisfying within the co-becoming in the scholarly community? Jean-Luc Nancy (2000) makes the distinction that the subject is not a linear, evolving entity reaching toward some perfect endpoint. Rather, he claims a kind of existential immediacy whereby,

> What we have in common is what always distinguishes and differentiates us. ... This is not the absence of a figure, but a plan always being sketched out, a fiction always being invented, a *mêlée* of traits. And it is not that identity is always "on the way," projected onto the horizon like a friendly star, like a value or a regulative idea. It never comes to be; it never identifies itself, even as an infinite projection, *because it is already there*, because it is the *mêlée*. (p. 155)

Nancy's description of being in the world stems, not from any one point, but from a trajectory already in motion. It is not to suggest that his is a linear path of inquiry but movement within encounters or touching(s) of difference – encounters with another. He does not use the term, singular, as a synonym for identity nor individualism, which he finds too close to the Cartesian split of the subject and other (James, 2006). For Nancy (2000), the existential relationship that the singular holds in tension with the plural is the pivotal point: the being of one with another, multiplied infinitely with past and simultaneous encounters, is the plural of community: not the wholeness or oneness of a single entity called community within which we all could become subservient.

This subtle shift in understanding has important implications for the ways that we relate to each other within our various groups. Immediately the value of being an individual part of a community

becomes replaced with the importance of the active relationship of one with another. As I work with my hands, drawing tenure, seeking sensual and theoretical limits, the way that Nancy values a bodily reference as well as an entry into making meaning is a significant aspect of his work for me. I begin to notice that my translation of philosophy to drawing is offering me alternative, reflective ways to *become* as scholar and artist.

One challenge in writing/drawing this paper rests in being open to possibilities that shake the very structures of who I think I am as a scholar. In education, teachers often privilege a practical approach to their enterprises over a meandering of ideas into creative, ontological wandering. It is difficult to trust in such an alternative way of thinking at such a deep level: in this case, to comprehend deeply that existentially, community happens in the exposure to another, where differences touch. Sociability and community rests within such vulnerable exposures (Nancy, 2000). These are tricky concepts to reconcile with daily classroom rhythms. Unlike philosophical ruminations that often remain at the level of analysis and critique, education encourages and necessitates involvement and action.

In front of me, unrolled and weighed down on the floor, is a large sheet of drawing paper, eburnean in colour, slightly rough, blank, creamy, and expectant. As a strategy to deeply consider my situation, I attempt to capture such significance of this thinking as I work, moving from one colour, movement, or thought to another. This is the nature of my inquiry, of touching thought already moving, marking it with/as drawing. The activity of drawing as the *becoming* to tenure through unwinding creates pauses on paper and in scheduled time where linearity is replaced by immediacy and circularity. There is little space here for the logic of the sequential.

Within the underdrawing, the gesture of creative impulse finds a temporary home, balanced precariously on the razor sharp moment of difference, what Nancy (2000) notes is the kernel of meaning, generated and emergent as sense. Behind me, within my touch, are three piles. I am influenced by the contents of these three stacks of documents as I draw, thinking about what is piled behind me, edging and digging into my back. As an initial foray into slowing down the institutional pace that presses upon me, I entertain the third pile first, as I break into the uniform expanse of paper.

In this stack, there are thick books with the dark, muffled covers that accompany the presses of prestige. I turn the pages and understand from philosophical and educational scholars, ways that I, as

learner/teacher, am part of a post-historical university system (Reading, 1996). Reading's response to the contemporary state of academia is to percolate a "community of dissensus," influenced by Nancy's unworkable community. Nancy (2000, pp. 154-155) asks,

> What is a community? It is not a macroorganism, or a big family. ... The common, having-in-common or being-in-common, excludes interior unity, subsistence, and presence in and for itself. Being with, being together and even being "united" are precisely not a matter of being "one."

At the heart of Reading's vision is the larger ethical frame of reference that centers on aspects of obligation and vulnerability that accompany the focus on the relationship as a *becoming* of subjectivity and meaning (in Nancy, 2000).

As I continue, intently browsing through the pile of darkly scholarly texts, the corresponding level of colour on the drawing complies, yet at the same time, it undoes the carefully constructed arguments and convoluted layering of language. It is ironic, in a small way, that language ties my body into knots, yet the ideas squeezed out of the books refer me to bodily existence and sensing the world, and also propel me forward into a sense of meaningful event unfolding as I write: *transimmanence*, Nancy (2000) calls this kind of existential threshold *both/neither* transcendent *and/nor* immanent. I sit back, knees actually sore now, the body complaining about such youthful postures in a fourth floor office. The underdrawing, faint in places, darkly scoured in others, is a plane of my thoughts and gestures, yet tension builds between the drawing as an immediate gesture, and the drawing as a foundational support for painting. Lying celestial and mellifluous, flat on the floor, it reflects a curious, distilled moment.

I scan the content of these diverse piles and I resist an early and premature convergence in my exploration. I search for more openings and convoluted lines of flight within the information. In the center pile is a stack of printed documents about art. They hint at my tone and pace of creativity, and include my doodles for a paper, scraps from postcards, and reproductions of famous artworks: da Vinci's crosshatching, Miro's friendly red, Durer's exactitude. This pile is a visual nest for the underdrawing, and I spread out the flotsam as I pick up a crayon.

> Caesious, the blue-grey tone in my hands, like the downy slip of the jay, warm, feathers so soft they leach blue from my fingertips, where, palm readers tell me, I hold deep and skidding emotions.

In this room there is a subtle, celadon caste of light, caught at the edge of my vision, as in the fleeting glimpse of a camouflaged egg. The sound of blue that touches the corners of the paper softens the surface as I mark the edge with indigo, wandering back and around. The wide swathes of deep, bottomless blue begin to emit the encouraging paragraphs of organizational possibilities offered by the self-help advice for the production of a scholar. This, from the pile of books that constitutes a thoroughly orchestrated, segmented worm of knowledge, giving me a list of actions in answer to the repeated question, "How to get tenure?" The colourful book jackets remind me of the self-help shelf at the bookshop, where I can browse titles that all seem to offer quick and foolproof plans ... how to *get* ... how to *stop* ... how to *become*. An eight-step plan is offered in one publication; another suggests various, potential routes to tenure, listing the stages toward publishing glory, and the glistening and slick cementing of a scholarly reputation glued to the solid foundations of True and Knowledge. But we know the solid foundations are of ice, not stone, and they have been melting under the heat of a post-structural world that questions the normative assumptions within all and every regime of signification. Knowledge without the frame, now there is a challenge for all shades of blue.

This drawing continues with the complicity of these piles of papers and books that become jumbled loosely together, rearranged haphazardly on the floor. The underdrawing will be completely covered, in the end, with my arrival in the form of teaching testimonials, papers published, service rendered, committees sat – all at the edge of tenure. I change to a dappling grey, a liard motion in the edge of my hand, marking the middle of the picture plane with stippling, like lost marks of punctuation. The cadence of a presentation voice, with the thoughtfulness of tone, enunciation, and volume of words spoken in front of students and colleagues is hidden between these marks like pauses that expose a lost train of thought. The memories of planned pacing, deep breathing, stretching of lips and tongue, vocalizations in the empty restroom, reminding me of childbirth: all is silently drawn onto and into the paper, seeping down in quiet pigment, next to pale pink with brilliant vermillion anchors. What does it mean to *be/become*, as part of this academic community?

The hoary shadows that result from my drawing remind me of the endless piles of information, the history of education, the history of drawing, the history of artists, and the history of qualitative research. Now I shade with jessamy giddiness, tracing the shape of my fingernail

and smudging the yellow so that it fades slowly into the blue. The larger chunk of enjoyable writing for the tenure process will be an emergent honing of my philosophy of education. I realize, as I unwind through this drawing, that nothing else seems as significant as this required segment: I begin and end with it. Within a continuing philosophy of education an entire life philosophy must align, overlap, inform, and weave through personal experience in the world. I draw as a form of this philosophy, in crimson loops and speedy gestures, turning back from an imaginary future point to this moment, already past, experience glued fast to my wrist. To breathe in and out slowly, the stretch of the wrist at the tip of cardinal line, subtle differences in shades of red, sanguine, all and each shade dependent upon the breath at the draw of oxygen, at the zenith of life; or at the edge of the exhale, coloured a corresponding darker excess. To draw in.

Conclusion

Unwinding through our drawing and writing from a predicted point of future tenure, we complicate the direct path that encourages efficiency toward acquisition of the bell chime of institutional "excellence." Our collaboration serves as a *kairos* of the teachable moment for those of us on this track to tenure, and for those who have traveled this road before us. If we breathe slowly, flexing our experimental, creative research curiosity, the track to tenure becomes more enjoyably convoluted with each chronotopic sojourn. The process offers opportunities to grow as scholars and teachers. Falling back in step with our own unique *tempo giusto* we unwind, stretching from, with, and across our respective disciplines of art and technology. Here we name our speed; we define our scholarship.

The slow breath that we seek is drawn in the moment we make time to play with children in a kindergarten classroom, or take time to listen to a student's struggles: in the moment we regrettably but realistically decline yet another fabulous research opportunity, or venture an untried idea with our students: in the moment we open a thoughtful book, or converse with a colleague over tea. Here, we open novel chronotopic sites for learning and these unsung moments unfurl creativity. Here, tenure becomes as intricate and as layered as the drawing on the floor. Carving the direct, efficient path too easily suffers from a loss of aesthetic potential. Instead, we unwind the tenure track so that it fits our variegated lives. Such responsive changes of pace and place promise to

open fresh spaces to slip into uncharted possibilities, relating to others as we slowly breathe in the fresh air of children's voices.

REFERENCES

Austin, R.D. (1996). *Measuring and managing performance in organizations.* New York: Dorset House.

Bakhtin, M.M. (1981). *The dialogic imagination: Four essays by M.M. Bakhtin,* (C. Emerson & M. Holquist, Trans.). Austin: University of Texas Press.

Clayton, B. (2004). *A Penelopean poetics: Reweaving the feminine in Homer's Odyssey.* Toronto: Lexington Books

Donoghue, F. (2008). *The last professors: The corporate university and the fate of the humanities.* New York: Fordham University Press.

Fish, S. (2005). Take this job and do it: Administering the university without an idea. *Critical Inquiry, 31,* 271-285.

Freire, P. (1970). *Pedagogy of the oppressed.* New York: Continuum.

Honoré, C. (2004). *In praise of slowness: How a worldwide movement is challenging the cult of speed.* San Francisco, CA: Harper

James, I. (2006). *The fragmentary demand: An introduction to the philosophy of Jean-Luc Nancy.* Stanford, CA: Stanford University Press.

Le Guin, U.K. (1985), She unnames them. *The New Yorker,* January 21, 1985, p. 27.

Nancy, J-L. (2000). *Being singular plural.* Stanford, CA: Stanford University Press.

Readings, B. (1996). *The university in ruins.* Cambridge, MA: Harvard University Press.

Schreiber Jacoby, B. & Shelley, M. "Drawing." Grove Art Online. Oxford Art Online. Retrieved from http://www.oxfordartonline.com/subscriber/article/grove/art/T023557

Treanor, B. (2008). Slow university: A manifesto. Retrieved from http://myweb.lmu.edu/btreanor/Slow%20University%20Manifesto.htm

Patti Pente is an artist and scholar, and an Assistant Professor working at the University of Alberta. She completed her doctoral degree in curriculum studies at the University of British Columbia. She reaches into the pedagogical shifts in meaning that occur when examining personal and professional identity through art process. Her interests also include connections between notions of place and the learning subject, with particular emphasis on contemporary philosophy. In addition, she continues to investigate the nature of physical and virtual experiences of viewing through various technologies that incorporate screens. She approaches these interests through arts-based research

methodologies that include painting, poetry, video, and site-specific work.

Catherine Adams is an Assistant Professor, Department of Secondary Education at the University of Alberta. Her primary research interests concern the widespread integration of digital technologies in education; hermeneutic phenomenology is her main approach to inquiry. Cathy's dissertation research investigated students' and teachers' lived experiences of digital media technology in the classroom. She continues to ground her investigations of educational technologies in phenomenology, sometimes augmenting her inquiries with complementary qualitative research approaches and theoretical perspectives such as human environmental aesthetics, Actor-Network Theory, media ecology, and critical media studies. She teaches a graduate course on the pedagogy of technology, as well as doctoral seminar with Dr. Max van Manen on hermeneutic phenomenological research and writing.

Authors Addresses:
Patti Pente
Department of Elementary Education
551 Education Centre South
University of Alberta
Edmonton, Alberta
CANADA T6G 2G5
EMAIL: pente@ualberta.ca

Catherine Adams
Department of Secondary Education
347 Education Centre South
University of Alberta
Edmonton, Alberta
CANADA T6G 2G5
EMAIL: cathy.adams@ualberta.ca