Storytelling in University Education: Emotion, Teachable Moments, and the Value of Life

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ABSTRACT: Teaching as a process of storytelling allows faculty to reach out to students' emotions, breathing life into the ideas that are being taught and learned. Storytelling among indigenous peoples emphasizes the importance of balanced relationships with the land, with all living creatures, and with the cosmos. It serves different functions in other societies that can also enhance teaching and learning. Alfred North Whitehead's account of emotions is relevant to the learning process and to teachable moments better understood as learning opportunities that enhance the value of students' lives. I provide an example of such a learning opportunity in which one of my students experienced an energetic connection with her colleagues as a living community. Teachable moments and storytelling can strengthen students' range of comprehension, their imaginative and aesthetic appreciation, as well as their growing capacity to learn. True stories – those based on a process which more coherently and inclusively takes into account life coordinates – enable students and faculty to critique the money sequence of value of the global market. A pedagogy based on true storytelling opens up spaces for the expression of different groups whose voices have been marginalized.

RESUME: Par le biais de la narration qui fait partie de l'enseignement, le corps enseignant peut saisir le côté affectif des étudiants, reprendre des idées enseignées et apprises. Au sein des communautés autochtones, la narration met en exergue l'importance d'un rapport équilibré avec la terre, les créatures vivantes et le cosmos alors que dans d'autres sociétés, la narration revêt différentes fonctions qui peuvent servir à renforcer l'enseignement et l'apprentissage. Le compte-rendu sur les émotions que fait Alfred North Whitehead, s'intègre bien dans le processus de l'apprentissage et dans les moments propices à l'enseignement mieux acceptés comme des occasions pour apprendre, augmentant ainsi la valeur de la vie des apprenants. Je relate ici un exemple d'occasion pour apprendre dans lequel une de

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mes étudiantes a établi un lien important avec une de ses camarades comme l'on connaît au sein d'une collectivité. Les moments propices à l'enseignement et la narration peuvent renforcer le taux de compréhension des apprenants, leur évaluation créative et esthétique aussi bien que leur aptitude croissante à apprendre. Les histoires vraies, à partir d'un développement qui prend en compte la vie dans son ensemble d'une façon plus cohérente et plus complète, permettent aux étudiants et au corps enseignant de critiquer le cours de la valeur de l'argent sur le marché mondial. Une pédagogie narrative qui repose sur la réalité, ouvre des portes à l'expression pour des groupes différents jusqu à présents exclus.

"Storytelling is at the heart of human conduct."
(Schulz, 1997, p.1)
"We are hard wired to tell stories."
(Margaret Atwood, *Q*, CBC Radio, October 17, 2011)
"Today the fight for life, the fight for Eros,
is the *political* fight." (Marcuse, 1966, p. xxv)

Introduction

One way to understand teaching is to think of it as a process of storytelling about ourselves as professors and about the subjects we teach. On the one hand, we provide a narrative about our own lives in the hope that our interests and passions will reach out to our students and enable them to become engaged learners. On the other, we tell stories about the subject matter itself, the reasons for its importance, the ways in which it has developed, the questions it poses of reality and social relations, the problems it may help to resolve, and even our own struggles to learn and teach it. The purpose of both these aspects of storytelling is to "humanize" the process of learning by appealing to the students' imagination, so that they can consider themselves active participants in the pursuit of knowledge and feel empowered to tell stories about their own experience and deepen their understanding of the subject. Storytelling then becomes central to learning itself as students are emboldened to provide narratives showing how knowledge comes alive for them. As future teachers, for example, they can begin to imagine how the knowledge gained in a class on history and philosophy of education could empower them to tell stories about the problems they would face in their own classrooms. During this process they may recognize the value of their lives not only as teachers but as human

beings in relation to others. And on the basis of this understanding they learn to recount stories that take into account the planetary life coordinates without which their own lives would be expunged. At least, this is what I go on to argue.

Storytelling and Narrative

The distinction between storytelling and narrative normally runs as follows. Storytelling is what we do in recounting our lives, whether we are teachers, students, construction workers, or professional women. There is something about storytelling and its informal, conversational style that captures the ebb and flow of our experience in a way that scientific discourse with its emphasis on laws and abstract formulae does not (Clandinin, 1993, pp.178-179). Narrative, by contrast, provides a valuable methodology for doing research about teaching and learning, for example, which enables the researcher to remain true to the experience of the participants while rising to a meta-level in describing its key characteristics. As Jean Clandinin and Michael Connelly (1994) put it: "people by nature lead storied lives and tell stories of those lives, whereas narrative researchers describe such lives, collect and tell stories of them, and write narratives of experience" (p. 416). The advantage of using narrative or "interpretive-hermeneutic" methodologies is that they provide an insight into the concrete experience of learners too often ignored by what Jerome Bruner (1996) calls the "set of shallow experimental routines" given by a "causal-explanatory" approach (p. 112). Bruner believes that a comprehensive study of learning requires both interpretive-hermeneutic (narrative) and causal-explanatory research methods to complement one another (p. 110). Narrative, in general, selects out the most important aspects of the experience of participants in order to construct a meaningful interpretation of what they live through in the classroom or in other walks of life (Schulz, 1997, pp. 2, 106).

My interest here is in *the act of teaching as storytelling* rather than *narrative research about teaching*. The aim is to understand how teaching and learning are forms of storytelling and how they could be improved by utilizing stories as their core. In other words, I'm more interested in university teachers *as* storytellers than in the research they conduct *through* narrative inquiry. Of course, it may well be that I too am engaging in such inquiry, but that is not my main interest (Garrison, 1997, p. 98). Rather, it is the connection between storytelling

in education and the value of life which concerns me: how the former can deepen the experience of both teachers and students in life-value, defined as organic movement, sentience and feeling, and thought (McMurtry, 1998, p. 298).

The structure of the article is as follows. I begin with a brief survey of the significance of storytelling in different cultures. I then turn to an analysis of how stories encapsulate not only the ebb and flow of human experience but also its emotional substratum, using both Alfred North Whitehead's (1861-1947) analysis of emotion and more recent accounts. I consider the ways in which teachable moments reflect an organic process of growth, and show how the experience of one of my students heightened her opportunity to learn. I then provide an analysis of teachable moments, arguing they are better understood as learning opportunities for students in which their own energetic flow connects them with other students, the subject matter, and the professor in a creative, life-enhancing process. In order to justify this claim, I consider the following issues: how teachable moments as learning opportunities enable the expression of students' emotions and range of comprehension; the ability of learning opportunities and storytelling to incorporate imaginative and aesthetic appreciation; and the ways in which the two elicit learning. Finally, I consider the question of truth in storytelling as a process of more coherently inclusive taking into account and its importance for pedagogy in advocating a life-based value system in the face of the ravages of the global market.

Storytelling and Human Experience

In the oral traditions of Indigenous peoples stories are one of several ways in which knowledge is passed on by elders. The stories told are as diverse as the groups themselves, and they may have various purposes. As Jo-ann Archibald (2008) shows:

> Each Aboriginal nation has traditions, protocols, and rules concerning stories and the way that stories are to be told for teaching and learning purposes. The types of stories can vary from the sacred to the historical, from cultural traditions to personal life experiences and testimonials. Some stories are just for fun, while others have powerful "teachings." Some stories may be "owned," those that are the responsibility of individuals, clans or families; some belong to the "public domain," being available for anyone to tell. Some stories can be told only at certain times of the year. (p. 83)

The different forms which stories take, the purposes they embody, the times when they can told, and their public availability show just how central they are to Indigenous peoples. Precisely because they are "at the core of our cultures," Archibald argues, "they have the power to make us think, feel, and be good human beings. They have the power to bring storied life back to us" (p. 139). Leading a good life involves leading a storied life, a life in which one's experience connects with the power of stories to engage the heart, mind, body, and spirit, so that they are in balance with one another.

According to Marie Battiste and Sahej Henderson (2000), stories also emphasize the importance of balanced relationships both with the land and among human beings, and they provide the spiritual understandings characterizing Indigenous value systems (pp. 9-10, 77-79). Indigenous peoples' relationship with the land as the source of all life reflects their recognition of the sacred nature of all living creatures sustained by the plenitude of the planet (pp. 100-101). The knowledge passed on in storytelling is a relational process, one that includes all entities in the universe: "It is with the cosmos, it is with the animals, with the plants, with the earth that we share this knowledge" (Wilson, 2001, p. 177). Furthermore, storytelling has formed an integral part of traditional First Nations education in North America, whose holistic nature "can be characterized as oral histories, teaching stories, ceremonies, apprenticeships, learning games, formal instruction, tutoring, and tag-along teaching" (Hampton, 1993, p. 268).

Among the Inuit of Greenland, stories about peoples' lives can embody "details of dreams, nightmares, déjà vu, premonitions, and seeming imagination" (Jessen Williamson, 2011, p. 60). Because these "internal" events are normally excluded by Western researchers, they are required to re-evaluate established methods of research as well as their world view. African stories are also told in combination with songs, dances, drumming, and ceremonies which celebrate life and death, the gathering of the harvest, the passing of the seasons, and significant periods in the lives of the young, thereby providing an integrated form of understanding directly related to the experience of those listening (Mazrui, 1978, p. 300; Mensah, 2010, pp. 45-48).

Aboriginal author Thomas King (2003) believes that: "The truth about stories is that's all we are. 'You can't understand the world without telling a story,' the Anishinabe writer Gerald Vizenor tells us. 'There isn't any centre to the world but a story' " (p. 32). The centrality

of storytelling to the lives of Indigenous peoples and the oral traditions which sustain them cannot be overemphasized. King goes further, however, arguing that, "we live stories that either give our lives meaning or negate it with meaninglessness" (p. 153), and the "we" here seems to refer to humanity in general. As public acts shared with an audience (p. 154), oral stories are an important way of relating our experience by strengthening community and sense of solidarity or, alternatively, of demonstrating our alienation from the world and humankind (pp. 118, 165).

If oral stories do indeed have the power to create community, why not use them in university teaching and learning? In doing so, however, we might well be engaging in acts of cultural appropriation from Indigenous peoples if theirs were the *only* stories upon which to draw (Hare, 1993, pp. 58-61). Fortunately, storytelling in either oral or written form is a practice shared among many peoples. These diverse forms include, but are not limited to, the following: folk tales and folk music, fables, archetypes, myths, children's stories, and even gossip (Bateson, 2007, pp. 219, 221-222; Marken, 2010). In Celtic communities, songs and stories are a way of retelling and reliving the past in order that oppression not be forgotten, so that its peoples can move forward, celebrating the present and imagining a different future often by using wit and humour (Connolly, 2010). In the United Kingdom, there has been an upsurge in the practice of storytelling in which narrators reveal truths about themselves in front of strangers in order to tell of their passions or rid themselves of personal demons (Kellaway, 2011). Stories may also provide a way of living in the world that enables the narrator to recount the suffering of others while emphasizing "the mutuality that can exist among us" (Orbinski, 2008, p. 4). And Canadian culture itself has been conceived as having a strong oral tradition in which public debate has informed the formulation of policy – an approach shared by some of the country's leading intellectuals that is characterized by "the humanist, the informal or flexible ... [that] belongs to the oral tradition" (Ralston Saul, 1997, p. 219).

Storytelling and the Emotions

Some authors believe that the open-ended structure of storytelling reflects the ebb and flow of human experience in ways which make it particularly suitable as a pedagogical tool (Kvernbekk, 2007, pp. 307, 308; Randall & Furlong, 2007, p. 210). Their argument begs a further

question, however: What is it about stories that resonates with human experience at a fundamental level?

Whitehead's account is helpful here, for he asserts that the core of experience is emotional and that if, as faculty, we wish to connect with our students we need to recognize this brute fact. As he puts it, in order for ideas to come alive we should relate them "to that stream, compounded of sense perceptions, feelings, hopes, desires, and of mental activities adjusting thought to thought, which forms our life" (1957b, p.3). Feelings, hopes, and desires comprise the deep emotional currents from which spring sensory awareness and the intellectual capacity to utilize ideas. As faculty, we need to connect the ideas we teach to the flowing stream of emotions at the core of our students' experience in order for them to appreciate their meaning. Failure to connect with the emotional and intellectual experience of our students results in " 'inert ideas' " – that is to say, ideas that are merely received into the mind without being utilized, or tested, or thrown into fresh combinations" (1957b, p. 1).

Whitehead uses the metaphor of a stream to indicate both the fluid *and* open-ended character of lived experience, undergirded by the deep currents of feeling and emotion which enable learning to take place. The stories which flow from the experience of teachers can provide an emotional connection to their students *if* they embody the passion for their subject which they still feel. Without this connection, the ideas being taught remain inert. Nevertheless, students who do connect to the professor's enthusiasm are more likely to find the ideas appealing because they correspond in some way to their own desires and aspirations. While stories emanating from faculty cannot elicit learning without strong emotional currents already flowing within the students themselves, they can provide the right kind of opportunity for self-expression and love of learning (Kohl, 2009, p. 12).

At least one study confirms the importance of emotion to learning. My colleague, Mark Flynn, together with another colleague from Finland, Hannu Soini, asked more than 230 students in the colleges of education at the Universities of Saskatchewan and Oulu to "give a concrete example of a situation in which you really learned something." By means of a constant comparative method, "emotional significance" emerged as the primary aspect of learning in the reports of almost two-thirds of the students, both Canadian and Finnish, male and female.[1] In light of Flynn's earlier article (1995) supporting the view that

"emotion is the primary feeling from which consciousness and learning grow," the two researchers became intrigued about possible comparisons with Whitehead's theory of learning and growth. They found that students at both universities felt joy, enthusiasm, and aesthetic appreciation when learning had the deepest meaning, whether their experience took place in formal or informal educational settings. While their study is preliminary, and any analysis of the results is tentative, its goal "was to evoke discussion and questions that might guide further research" (Soini & Flynn, 2005, pp. 75, 81).

Theoretical work about the relationship between emotion and learning and the importance of stories abounds.[2] Parker Palmer supports both ideas. He proposes that emotions are fundamental to the learning process and should be integrated with intellectual and spiritual understanding in any balanced approach to education. Palmer emphasizes "the inner landscape of teaching" as the experiential baseline for the pedagogical relationship. "By *emotional* I mean the way we and our students feel as we teach and learn – feelings that can either enlarge or diminish the exchange between us" (1998, pp. 5, 4-5). The feelings experienced by the students in Soini and Flynn's study enhanced their emotional and intellectual range, but had they been invited to comment on a situation in which they *failed* to learn something, their emotions would have probably taken the form of aversions to the teacher, subject matter, or both.

Furthermore, stories, Palmer argues, can reach out to readers and students in ways that other explanations cannot: "Stories are the best way to portray realities of this sort, so here is a tale of two people I have known, whose lives tell me more about the subtleties of identity and integrity than any theory could" (1998, p. 14). While he does explain the concepts of identity and integrity as the growing capacity to understand oneself and realize one's potential for wholeness (p. 13), Palmer illustrates the ways in which they can be enhanced or expunged by telling a story about two contrasting characters from his own experience. One became "a self divided, engaged in a civil war," so that "his teaching devolved into combat rather than craft," while the other brought "great generosity ... to his teaching and research, [and] the same sense of craft" as his rural forebears who had worked with metal and wood (p. 15). The contrasts between fragile identity and alienation, on the one hand, and open identity and integration, on the other, are underscored in graphic manner by the use of a relatively simple story (pp. 14-16). An integral part of good teaching, according to Palmer, is the use of storytelling,

which enables faculty to reveal their identities to students, bridge the divide too often secured by status, and provide them with opportunities to learn by grasping concepts from real life situations to which they can relate (pp. 16, 18, 21-23, 42, 54-56, 168-170).

Teachable Moments as Learning Opportunities Reflected in a Student's Story

There may be times when teaching and the process of storytelling culminate in what are called "teachable moments," those joyful events in the rhythm of teaching and learning when previously hidden connections are established, however fleetingly, among participants and the subject matter. This "almost ineffable experience" in which a "special quality of intimacy, openness and creativity" combines with a process of "getting through to our students, of connecting and of students learning" is often hard to define and is easily missed (Garrison, 1997, p. 115). Jim Garrison understands teachable moments in the following way:

> I propose understanding teachable moments as the times when spaces open for the student and teacher to interact in a synchronistic and dynamic rhythm. It is like having a good dance partner. During these moments ... students [are] realizing breakthroughs in learning or experiencing an effortless flow of learning. Good teachers know intuitively ... how sometimes these moments are very subtle, barely perceptible to even an experienced eye, and how at other times they are obvious to all. (p.122)

I analyze teachable moments more fully in the next section, but wish to draw attention here to the organic metaphors he uses to describe teachable moments *as* learning opportunities. They are *relational spaces* opening up a *dynamic rhythm* in which each *pedagogical partner dances with the other,* enabling the student to experience an *effortless flow in learning* and the teacher to use their *intuition* to understand their significance. I believe *teachable moments are better understood as learning opportunities, because they involve an energetic flow conjoining students with each other, with the subject matter, and possibly the professor.* Learning opportunities grow out of a background of trust and openness that enables students to flourish in new ways. Because of their *organic* nature, learning opportunities can initially "allow us to maintain, enjoy, and enhance our existence" (p. 142) in community with others. But they can also enable students and faculty to engage in creative activities that unify the inner and outer dimensions of our lives and enhance their value (p. 49). These occasions cannot be produced by

mechanistic approaches in which teaching is conceived as a set of inputs which modify the learning outputs of students measured in exclusively behavioral terms (Woodhouse, 2009, pp. 218-219).

The process through which teachable moments can occur is illustrated by a story from my own experience as a university teacher in which a student's imagination caught fire and created a valuable learning opportunity for her. Several years ago during the fall semester, I was teaching a course on history and philosophy of education in which we had been discussing the importance of democracy both in the work of John Dewey and the community schools of Saskatchewan. With some guidance on my part, the class of 35 students decided to go outside on a bright, sunny, October day to continue our discussion. One of the students later described her experience when writing about it in a final examination (and then gave me permission to use it in my research):

> Holistic experiences happen when one is completely involved on every level of one's being. The walls of a classroom can feel confining and create containment. The experience of having a class outside was quite mind blowing. I realized that all of the important resources from which I have been trained to cut myself off as a person, teacher, and student were out in nature. My senses heard the birds, felt the sunlight on my cheek, and I smelled the leaves. I was totally alive and connected to the world. I noticed a leaf on the picnic table and someone had written a word on it. ... Another leaf fell on the table and I made a drawing on it. I was experiencing an organic union with nature and with other students' ideas, and felt part of a group experience. We were creating community in a class that I had not felt before. [3]

Some people reading this description might infer that the student was distracted from learning by being outside in nature – by the birds, by the sunlight, and the falling leaves. But this is not *her* view. Rather, she experienced feelings of being fully alive that connected her with other students. Together, they were creating a sense of community by discussing ideas in a way she had not experienced before. And this was made possible by a feeling of organic union, an experience of relatedness that infused her appreciation for the beauty of nature and the rich potentiality of the world of ideas. The freedom of being outside on a sunny day enabled the student to discover new insights in a joyful manner which re-engaged her love for ideas. As a student of art education, she was especially aware of the aesthetic aspects of the

outdoor experience, which strengthened her imagination and the possibilities which nature offered for her learning and development as a teacher. Some of the other students were less enamored of their experience outside, however, complaining of the lack of seating, the difficulty in taking notes, and the growing numbness in their limbs. Nevertheless, they continued to talk about it for some time afterwards as a distinctive approach to teaching and learning, one which they realized had considerable merit.

To some extent, the student's description reflects the understanding of teachable moments proposed by Garrison. Hers was an experience that took place on several levels: she felt an *organic union with nature*, a holistic feeling of connectedness to the natural world, to those "myriad creatures" (Lao Tzu, 1963, pp. 57, 58, 61, 91) which she recognized as having the potential to deepen her learning; she also experienced *living connections with her colleagues' ideas*, which were shared in new ways allowing them to *flow together*, a process which *created novel relationships* and a growing sense of community based on the time they were spending outside.

There is, however, no mention of my role in her entire description. Nor was I aware that the student was experiencing a subtle and quite profound learning opportunity. Was I, therefore, irrelevant to her experience? Possibly, but it may well be that teachers have a far more limited role in their students' learning than is often supposed. As Whitehead explains, "for all your stimulation and guidance the creative impulse towards growth comes from within [the student]." At the same time, he acknowledges that: "The teacher has a double function. It is for him [sic] to elicit the enthusiasm by resonance from his own personality, and to create the environment of a larger knowledge and firmer purpose" (1957b, pp. 39-40). My enthusiasm for discussing ideas outdoors, based on several years' experience of students' appreciation for this exercise, enabled me to propose taking advantage of a *natural* environment where dialogue, engagement, and aesthetic appreciation could emerge in the experience of at least one student. At the same time, I failed to *intuit* what she was experiencing or to invite her to share her insights with the other students. Had I done so, however, there was a risk of disturbing the flow of this holistic experience and creating inhibitions about telling her story, since she had little idea of how her peers would receive it (Schulz, 1997, p. 106). Ironically, it may well have been better that I was ignorant of the significance of her experience, so

that the student could come to express her feelings freely in the final examination when she felt safe to do so. But this is far from being a general rule, since there are times when students want to share their experience of a teachable moment either in class or shortly afterwards, and they should be encouraged to do so. Whatever the occasion, students should be allowed to tell their stories about how such learning opportunities may have occurred and the ways in which they transformed their experience.

Emotion, Imagination, and Aesthetic Value in Stories as Teachable Moments

In order to understand teachable moments *as* learning opportunities more fully, I consider the following questions: In what ways do they actually engage students' emotions and broaden their range of comprehension? How do the imagination and aesthetic appreciation of students emerge in the process of storytelling and teachable moments? And, to what extent are stories and teachable moments comparable as learning opportunities? If, indeed, storytelling and teachable moments engage students by enhancing the scope of their emotions, range of comprehension, imagination, and aesthetic appreciation, can they also strengthen the value of their lives?

The first question involves the effortless flow of learning, which Garrison describes as accompanying the dynamic rhythm in the pedagogical relationship. During teachable moments "there is a special or enhanced quality of *intimacy*, openness, and creativity" [italics added] (1997, p. 122), allowing new spaces for learning to occur. The heightened *emotion* of the moment in which each partner participates in the rhythmic dance, creating novel patterns of understanding, is a significant step for those who take it. The metaphor of the dance employed by Garrison is a fluid one. It signifies the relational movements between student, teacher, and subject matter as ever evolving, since "the dance should be everywhere and the centre nowhere for very long," so that each partner can negotiate their way through the process of learning in a *dynamic rhythm* without getting stuck in a groove. There are for Garrison "three movements within the paradoxical opening that converge to create the teachable moment" (p. 117). Unless the faculty member and the subject they teach are involved in the movement of the dance, the likelihood of students experiencing a full identification with learning is diminished.[4] This was arguably the case

with the student in my class, for she enjoyed being outside and identifying with the experience in ways that went far beyond my anticipation as she felt new understandings emerge in conjunction with a growing sense of community. An *organic union* was established, a sense of identity and intimacy between herself, the subject under discussion, and her fellow students, which she had not felt in class until she enjoyed the rhythms of nature (Dewey, 2005, pp. 153-155).

Soini and Flynn (2005) provide a possible counterexample to Garrison's idea that teachers are a necessary condition for teachable moments as learning opportunities. They describe a young female student from a farming family in Saskatchewan who initially watched her father plough the summer fallow, then began to do it herself with some instruction from him, and finally continued on her own, an experience which was transformative and emotional (p. 76). While she would not have been able to plough furrows in a straight line without the guidance of her father, the young woman went on to use what she had learned and apply it in novel ways that she found deeply satisfying. This non-formal example suggests that the various learning opportunities described by Soini and Flynn can be achieved where learners are free to express themselves in ways that go beyond what they have internalized from mentors. The process of challenging the provisional authority of teachers by posing questions of reality and social relations has been recognized by a variety of authors as constituting the growth in intellectual independence and critical thought necessary for learning in a democratic society (Peters, 1973, pp. 47-48; Entwistle, 1976, p. 66; McMurtry, 1988, pp. 31, 40-41; Aronowitz, 2000, pp. 189-190; Angus, 2009, p. 140; Nussbaum, 2010, pp. 40, 50-51). Teachable moments form part of a process in which the emotions of learners enlarge their field of comprehension, broadening and deepening an understanding of reality and their capacity to act.

Turning to the second question, teachable moments as learning opportunities seem to involve both students' imagination and their aesthetic appreciation (Palmer, Zajonc, & Scribner, 2010, pp. 93, 96). One of the stories told by a student to Soini and Flynn (2005) in the course of their research illustrates this process quite well. He had recently taken a poetry course on human beings' relationship with nature in which the professor encouraged students to develop their own ideas. On the basis of this intellectual freedom and the joy which accompanied it, a paradigm shift occurred:

> From this I learned that "the arts" provide a whole new way to look at life on earth. Science, for example, provides a very efficient way to approach and deal with our environment. The arts provide a unique way to look at the world from different perspectives and develop conclusions and realities about the world we live in today. (p. 80)

The freedom of inquiry which this student experienced provided the conditions for his imagination to thrive, as he came to realize how poetry and the arts could furnish a new understanding of the planet and our relationship to it (Schulz, 1997, p. 132). While science frames laws and theories that increase human beings' control over nature, poetic sensibilities open up new vistas in which diverse alternatives are made possible. As Whitehead puts it, the student's imagination was engaged in "an intellectual adventure," a journey leading to an "imaginative grasp" of the transformative power of the arts (1957b, p. 94). Invited by his professor to share in the "adventures of ideas," he was able to pursue the "freshness, zest, and the extra keenness of intensity [that] arise from" an open process of discovery in which freedom and spontaneity give rise to a "search for new perfections" (Whitehead, 1961, p. 258). This search for new ideals engaged the student's imagination by eliciting "an intellectual survey of alternative possibilities," a process which enabled him "to construct an intellectual vision of a new world ... [and] preserve the zest of life by the suggestion of satisfying purposes" (Whitehead, 1957b, p. 93).

The student's story reveals that deeply satisfying purposes could express themselves, awakened by the aesthetic experience of poetic form. His conception of humans' relationship with nature had changed profoundly as its beauty was revealed in the verse of different authors. This is why Whitehead believes that art should be an integral part of any education, since it provides the most profound "sense of value ... [as] the sense of beauty, [or] the aesthetic sense of realized perfection" (1957b, p. 40). By appreciating works of poetry (or painting, theatre, music, and dance) as the culmination of finite creative effort, students recognize the distinctive value of beauty. And the beauty of art may well enable them to lead lives which have greater meaning than the alienated majority in (post)industrial society (Scarfe & Woodhouse, 2008, p. 196). Throughout this process, it is the "aesthetic emotions [which] provide us with vivid apprehensions of value" (Whitehead, 1957b, p. 40), as they allow for an open channel of recognition connecting the learner with the art object in question. Moreover, if, as

was the case with the poems studied by Soini and Flynn's student, the art object portrays human relationships with nature, it may nurture a new appreciation of the beauty of the planet.[5] In Garrison's terms, the freedom of inquiry enjoyed in the process of the student's learning was based on his emotional experience of the natural rhythm of education, "a pause in a larger process" (1997, p. 116), which matched the rhythms of nature. There was, indeed, a symmetry between the growth in the ways the student was learning and the dynamic presence of nature which revealed itself through the form of art (Dewey, 2005, p. 153).

In summary, stories can elicit learning through an appeal to students' emotions as they listen to, or create their own accounts of meaningful experiences about living and learning. The three examples I have given are all of students' stories in which they tell us about how they really learned something. And each story grew out of significant occasions, whether they occurred inside or outside the classroom, or took place over a period of time. These teachable moments *as learning occasions* took the form of a *rhythmic dance* between *partners – other students, subject matter, and those professors or mentors*, who may have facilitated what became *an effortless flow in learning*. The dynamic movement among these elements allows for a convergence to occur in the rhythm of learning (Garrison, 1997, p. 117), an *organic process* in which faculty's participation as storytellers is often a key element.[6] Narratives about similar occasions from their own experience, whether as students, teachers, or researchers can bring the subject matter to life in ways that appeal to the imagination of their students, and enable them to construct a new vision of the world and how they might change it as future teachers.[7]

For, as John Dewey (1944) suggests, teachable moments as learning occasions strengthen:

> The power to grow. We do not have to draw out or educe positive activities from [students] ... as some educational doctrines would have. Where there is life, there are already eager and impassioned activities. Growth is not something done to them; it is something they do. (p. 42)

Human beings have a capacity to learn which unfolds as a process of growth that characterizes life itself. The value of students' lives increases as the range of their emotional, intellectual, imaginative, and aesthetic understanding becomes both broader and deeper.[8] The passionate activities at the base of this process require careful nurturing by educators, not regimes of conditioning.

The Truth About Stories: Contesting the Global Market for the Sake of Life

Can storytelling change the world? King (2003) certainly hopes it can. "Stories" are a kind of "medicine," he writes, "a story told one way could cure ... [while] the same story told another way could injure." And as a result, "you have to be careful with the stories you tell" (pp. 92,10).[9] There are many ways in which stories can cause harm, and one of them, I believe, is when they fail to tell the truth. While it would be foolish, if not impossible, for faculty to insist on students telling true stories (how could we possibly know?), *we* should strive to do so in the hope that it inspires them to do the same. Truth, that is, conceived not in absolute terms, but as a process in which, as Whitehead argues: "The growth of reason is the increasing importance of critical judgments in the discipline of imaginative enjoyment" (1957a, p. 178). In order to reach this kind of truth, a process of inquiry founded on the value of critique should be counter-balanced by the joy and playfulness of the imagination, which in turn finds a rooted discipline in the facts of experience. Furthermore, truth and rationality are necessary conditions for a pedagogy capable of challenging the global market in the name of a value system which upholds human and planetary life as sovereign (McMurtry, 2009, pp. 86-87).

Journalist Kate Kellaway (2011) recounts her experience of telling a true story about her own poetry in front of complete strangers in a London pub, where people gather together on a weekly basis to listen to the narratives of others. The performers are all required to tell *true stories* from their own experience (the title of these occasions is "True Stories Told Live"). A basic attraction of the events, Kellaway claims, is that "we have a hunger for 'truth.' We want people to reveal themselves," because of the overabundance of new technologies that mediate communication in the global market. At the same time, she acknowledges that "what is fascinating about these evenings is their miscellaneous harmony" as the stories weave together, integrating their diversity into a creative unity reminiscent of the dancing figures in teachable moments.

Whitehead (1961) *appears* to abandon the concept of truth when claiming that "it is more important that a proposition be interesting than that it be true." The energy embodied in a proposition as an integral part of an actual lived experience constitutes both its interest and importance. A proposition, moreover, can be quite diverse – "a

notion about actualities, a suggestion, a theory, a supposition about things" – all of which could be included in a story. On the other hand, Whitehead writes:

> But of course a true proposition is more apt to be interesting than a false one. Also action in accordance with the emotional lure of a proposition is more apt to be successful if the proposition is true. And apart from action, the contemplation of truth has an interest of its own. But, after all this explanation and qualification, it remains true that the importance of a proposition lies in its interest. (p. 244)

In *reality*, this means that a true proposition is interesting in at least two ways: it lures the emotions of an agent so as to enable him or her to engage in successful action; and it also provides the basis for disinterested thought grounded in the facts of experience. Whitehead's account of truth is pragmatic-and-correspondence-oriented, according to the context in which it is sought.[10] Hence, a *true* story that is told in the course of teaching and learning will be more interesting than a false one both in theory and practice. While it remains "almost a tautology" (p. 244) that a proposition in such a story should interest students, a critical understanding of reality requires that it be true.[11] And this particularly so, if Whitehead's injunction to enable students to utilize their imagination in proposing alternatives to the status quo be followed (1957b, p. 93).

After all, truth and honesty are preconditions for the trust required in any pedagogical relationship where students learn to exert critical judgment (Hare, 1993, pp. 41, 136; Glasberg, 2011, pp. 33-34). Teachable moments as learning opportunities are unlikely to occur unless they are confident that faculty are engaged in "the truth of teaching or loving [which] is a process of long and difficult inquiry" (Garrison, 1997, p. 84).[12] Without our sharing true stories about the need for community in a globalized world where self-maximization is the basis for the defining logic of value, the potential for ethical understanding is negated (Smith, 2006, pp. 31-32). Only when students can distinguish between appearance and reality are they likely to understand the significance of the following questions: "Are the *representations* of the market system true to the world and their own claims? Or is their *reality* different from and opposed to their appearance?" (McMurtry, 1998, p. 36).[13] Are there, in other words, true stories hidden beneath the fabulations and monetary exchanges of the global market which can be uncovered by means of critical and imaginative inquiry? Could students then engage

in the search for knowledge as a vital activity in which they imagine new possibilities and evaluate them in the light of emergent facts formerly obscured by the dross of falsehood? [14]

The question remains, however, which theory of truth could best accommodate such storytelling with our students many of whom are well aware of the plight of the planet and the ways in which the global market contributes to poverty and injustice? A process theory which takes into account the value of life (as organic movement, sentience and feeling, and thought) independent of its use for maximizing private money profits provides a powerful way forward.[15] John McMurtry (2009), advocates just such a theory in the following terms: "As we come to understand that *truth is always a process of more coherently inclusive taking into account*, and life coordinates are what must always be taken into account to be consistent with our terrestrial condition, reason awakes" (pp. 81-82). A conception of truth as an evolving process that is never complete enables us to recognize stories, including those claiming to be scientific, as true to the extent that they provide an increasingly coherent and inclusive account of the events they describe. Wise, rational, and true storytelling requires reference to those coordinates which sustain and promote human and planetary life – clean air and water, nutritious food and shelter, forest ecosystems and diverse species, as well as all those institutions like public education and health care which enable human growth – for they "are at risk from the market's insatiable drive to maximize stockholder value" (Woodhouse, 2011, p. 14). Only stories whose framework is rich enough to include facts and propositions consistent with these life requirements can help students and faculty to understand how to uphold and promote the value of life by recognizing that: "Life's growth is the ethical sovereign, and ... is to be protected and developed as the first priority of society" (McMurtry, 1998, pp. 384-385).

In order for any proposition to be rational, however, it must satisfy the following criteria of truth:

(1) *consistency of premises with evidence*;
(2) *consistency of inferences with premises; and*
(3) *consistency of objectives with life support systems.* (McMurtry, 2009, p. 82)

Together they comprise "*the full coherence principle*" required to uphold the value of life. The question to be asked of any discipline then becomes: Do the goals it espouses on the basis of premises that are consistent with the evidence, and inferences consistent with those same

premises, support the kinds of life support systems mentioned above? While logic and science, respectively, adhere to the first two criteria, are they are blind to the third principle? If this is the case: "They are indifferent to whether their means and ends disable rather than enable life support systems [so that] in this lies their meta program of rootless disaster" (p. 82). Those examples of intellectuals who implicitly and inchoately express the third principle of rationality do so by critically interrogating the dominant assumptions of their disciplines and envisioning imaginative alternatives that embody life-promoting principles.

By way of contrast, where life support systems are excluded *a priori*, stories are likely to fall within "the currently ruling paradigm," namely:

> *The money sequence of value* ... [which] deploys life and lives as *its* means ... seeks only to maximize money possession ... [and] is ultimately an irrational choice sequence ... because it leaves all life requirements out of account. It eventually leads, as it now has, to the collapse of life support systems through generational time. (McMurtry, 2009, p. 81)

The narrow frame of the money sequence of value ($ – Life as Means – More $) reduces all life to an instrument for the private accumulation of more money. By ruling out the requirements for life, referred to above, the money sequence reveals its irrationality by hastening the collapse of life-sustaining systems in ways directly attributable to its life-blind logic.

Storytelling which incorporates true accounts of the value of life independent of its use for maximizing private money profits now becomes an imperative. Stories of this kind form the basis of a renewed pedagogy capable of providing hope to the lives of students and faculty alike as they recognize both their own worth and that of others outside the parameters of the corporate market.[16] In the contemporary university, for example, where students are reduced to customers, and collegial decision-making has been wrested from the hands of faculty by central administrators, the belief in collective, democratic action is evaporating (Aronowitz, 2000, pp. 164-166; Woodhouse, 2009, pp. 202, 220). However, true stories become a tool for challenging pessimism and asserting a life-enhancing value system, one that embraces both a different kind of university, where knowledge can be shared in the public interest, and a world in which the diversity of species and cultures is fully recognized. As David Smith (2006) puts it:

> Most especially, there has to be a retelling of the historical tales such as the Others who have been silenced under the triumphant narratives of empire are given their just due and embraced as necessarily contributive to any future worth sharing. Aboriginals, women, landless peasants in Africa and Latin America, exploited workers in the New Economy – all these have something to bring to the truth that is yet to be revealed. (p. 32)

We in the academy should be listening to historical and contemporary stories about the ways in which different groups have been denied a voice by colonialism and neo-colonialism: Indigenous peoples and peasants throughout the world, especially women who barely scrape together a living in the global economy, and many others who face growing unemployment and destitution. Their words must be heard in order for truth to emerge as a process of more coherently taking into account the lives of all members of the human species. Only then can a dialogue take place in which *their* understandings play a significant part in promoting the value structures capable of supporting life on this planet. Without their guidance about how best to conduct ourselves, the relentless plundering of planetary systems and the pauperization of humankind will continue apace. The issue becomes one of the will to act, or more accurately, the will to act in solidarity with the oppressed (Woodhouse, 2011, p. 19).

NOTES

1. The other aspects of learning that were reported as significant by the students were as follows: reflection (53%); differing perspectives (42%); collaboration (38%); autonomy (33%); and dialogue (24%) (Soini & Flynn, 2005, p.75). The statistical findings of the study have been published elsewhere (Soini, 1999).

2. Physicist, Arthur Zajonc, is unequivocal about the connection between emotion, teaching, and learning: "Teachings go deep when carried into the human being by deep affection; they can change us, teach us even to see the world differently. I have become increasingly convinced of the importance of ... the crucial relationship between love and knowledge" (2006, p. 1). I make a similar point with regard to Whitehead's account of learning (Woodhouse, 1999, p. 194).

3. It might be argued that the student's story is really a narrative. Tone Kvernbekk (2007) distinguishes between the two as follows: "anything can be a story. Narrative, on the other hand, is a distinct genre with certain demands;" namely, a "beginning-middle-ending structure," which confers a "unity" (p. 307) or "plot" (Bostrom, 2008, p. 393) upon the story; moreover, the student wrote it "with hindsight" after the event; and "some selection

has taken place" from the totality of events she experienced during the class outdoors (Kvernbekk, 2007, p. 308). If these characteristics are considered definitive of narratives, stories share them to a large extent (Dewey, 2005, p. 155), suggesting that any demarcation line between the two is permeable. A story about one's experience in a foreign country or with total strangers, for example, can have the same structure of beginning-middle-ending. Such stories are often told to highlight amusing or threatening aspects of the situation, which were the basis of strong emotions at the time and which provide a unity to the story in its retelling. Moreover, our everyday experience is selective in ways of which we are often unaware. On this latter point, Whitehead proposes that the process of selecting out elements from experience – what he calls "selective appropriation" – takes place on a preconscious level, and is essential to our ability to concentrate on particular elements in the complex flow of experience, because "learning ... requires selection" (Whitehead, 1948, pp. 1, 159; Scarfe, 2005, pp. 10-11; 2009, pp. 188-189).

4. Stephan Schindler (2005) also argues for the fluid relationship between teacher, students, and subject matter. He sees each member of the relationship as capable of becoming "the middle way" in "the Tao sign [considered] as a symbol for the educational process." *One* such way is when "the teacher is the connecting thread, the balancing act between the structure of the syllabus and the energy of the students" (pp. 46, 47).

5. The primordial role of the emotions in providing unity to aesthetic experience is fully recognized by John Dewey (2005). He believes that "the emotional phase binds parts together into a single whole" (pp. 56-57), the other parts of an experience consisting of "the intellectual" (giving meaning to it) and "the practical" (an interaction with the environment). As a result, "in a distinctively esthetic experience ... [the] dominant ... characteristics in virtue of which the experience is an integrated complete experience on its own account" (p. 57) are its inclusive, open-ended structure and the dynamic process of organic growth which makes further engagement with the environment possible. In education as in life, "the esthetic is no intruder in experience from without ... but ... is the clarified and intensified development of traits that belong to every normal complete experience" (p. 48). The enjoyment of everyday experiences like having a meal or going for a walk is intensified when the flavours of the food or the beauty of one's surroundings are selected for particular attention. For an analysis of Dewey's account of the imagination, see Dee Russell (1998, p. 193). Lev Vygotsky (1998) also makes a connection between emotional, imaginative, intellectual, and artistic forms of expression (p. 153) as does Martha Nussbaum (2010, pp. 103-112).

6. From a Whiteheadian perspective, this momentary "concrescence" (literally, *a growing together*) occurs when the learner and the teacher

engage in a self-creative process, transforming their experience by uniting the feelings at the base of their "subjective aim," or sense of purpose. In order for their aim to become objectified in a project and "clothe the dry bones with the flesh of a real being, emotional, purposive, appreciative," there is need for what Whitehead calls "the lure for feeling" as "the germ of mind" (Whitehead, 1957a, pp. 30, 103). Lured by feelings for the potency and beauty of ideas, faculty and students can then use conceptual understanding and meaning to determine which possibilities they wish to select, interpret, and act upon.

7. The art education student from my class later attended a presentation I gave on teaching and learning, and wrote to me as follows: "I was struck by the power of hearing my own words spoken back to me, and the thesis you built in conjunction with them. ... May your research continue to grow, be connected and transform your students' lives."

8. Garrison (1997), following Dewey, regards growth as "the all-inclusive and supreme value because artistic creation (*poiesis*, or calling into existence) is the most magnificent activity of the living creature" (p. 49).

9. In order for "stories [to] have an ability to sooth, to heal," elders among the Sto:olo and Coast Salish peoples use seven principles in storytelling for educational purposes: "respect, responsibility, reciprocity, reverence, holism, interrelatedness, and synergy." According to Archibald (2008), this helped her to "get to the 'core' of making meaning with and through stories" (pp. 98, ix, 140).

10. John Cobb (2008) believes that "Whitehead recognizes the importance of coherence and of pragmatic results in the effort to determine what is true. However, his definition of truth returns to correspondence" (p. 49). For an account of Whitehead's process theory of truth, see Ian Winchester (2005) who argues that "for a process theory of truth there are two questions one has to ask: First, what is the process involved (in the expression of or the interpretation of the truth)? And, second, what process of determination will enable us to decide whether or not the thought, judgment, or proposition is actually true. So in this account, process appears twice" (p. 213). See also n. 13. Novelist, Margaret Drabble (1977), expresses Whitehead's basic point in similar fashion: "He had never much gone for the theory that good storytellers have no respect for the truth: on the contrary he tended to think that only the truth could possibly be interesting" (p. 144).

11. Like Whitehead, Bertrand Russell (2004) does not abandon the concept of truth but acknowledges that it may have limited applicability in education: "Truth is for the gods ... an ideal, towards which we can approximate, but which we cannot hope to reach. Education should fit us for ... Truthfulness, [which] as I mean it, is the habit of forming our opinions on the evidence, and holding them with that degree of conviction which the evidence warrants. This degree will always fall short of complete certainty, and therefore we must be always ready to admit new evidence against

previous beliefs" (pp. 168-169). Stories which enable students to recognize the evolving nature of their own experience and to regard the knowledge claims which they and others make as fallible are constructive vehicles for truthfulness.

12. The comparison of teaching and loving here is apt because of the care, patience, wisdom, and other virtues required for both (Garrison, 1997, pp. 84-85).

13. Whitehead (1961) argues that "blunt truth is what we want," namely a process of "conformal correspondence" between the clear ideas of sense perception comprising Appearance and the vague, visceral feelings, referred to more formally as prehensions, which connect us to Reality. The significance of truth relations is considerable, since "apart from blunt truth, our lives sink decadently amid the perfume of hints and suggestions" (p. 250).

14. "The world now moves for the first time in history to a global struggle between knowledge and misrepresentation as the final contending forces" (McMurtry, 1998, p. 395).

15. McMurtry (1998) defines life in these terms (p. 298), and Garrison (1997) largely shares his view (p. 49). Kvernbekk (2007) advocates the correspondence theory of truth in her account of storytelling, contrasting it with both the coherence theory and the concept of verisimilitude (pp. 304-305, 313-314). Winchester (2005) shows how process, correspondence, coherence, and pragmatist theories of truth all figure in Whitehead's philosophy (pp. 209-212).

16. Could we learn from the Sto:olo, for example? They categorize narratives into two kinds: *sxwooxwiyam*, or "myth-like stories set in the distant past," which usually explain how things came to be and "how to make things right for the present generation;" and *squelqwel*, namely "true stories or news" describing "experiences in peoples' lives" (Carlson, cited in Archibald, p. 84). The principles of storytelling (see n. 9) could then be used to show the value of life through the consistency of their objectives with life support systems (e.g., reverence, respect, and a sense of responsibility for the interrelatedness of nature). Some philosophers, however, limit knowledge and truth to criteria (1) and (2) of the full coherence principle: "for epistemologists, to be regarded as *knowledge* the belief must actually be true, and furthermore must be warranted or supported by relevant evidence or an appropriate supporting argument" (Ruitenberg & Phillips, 2012, p. 4).

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