

After Frustration Comes Determination: Considering the Effectiveness of Research Assistantships Through Diverse Epistemic Lenses

Ewelina Kinga Niemczyk
Brock University

John Hodson
Brock University

Research assistantships are one of the few opportunities for graduate students to exercise their theoretical knowledge in a practical environment. This ground is literally where theory and practice collide, and through this experience methods, skills, and attitudes crucial to the new researcher are nurtured and perfected. This article, in the form of a song, reflects elements of some eastern Native singing traditions with all the related harmony and dissonance and is intended to encourage reflection about the following questions: How effective are research assistantships in imparting methods, skills, and attitudes; and how well does this experience prepare the next generation of researchers to meet the evolving needs of an ever-expanding, knowledge-based economy and society?

Through the voice of a graduate student, a recent newcomer who stands outside the Canadian educational experience, and the voice of an Aboriginal researcher, mainstream and Aboriginal research assistantships are compared to reveal how these traditions of research meet the expectations, challenges, and opportunities of an evolving research landscape.

Our Song

In Haudenosaunee singing societies, the round dance, and pow wow singing traditions, each song begins with a lead singer calling out the verse, which the other singers pick up and call back. This call-back is an echo of the lead, but it is also an elaboration of the core elements of the song that are introduced by the lead. This relationship between calling out and calling back is reflected in this article.

In this instance, the lead comes from Ewelina's experience as a research assistant (RA) in a mainstream as well as an Aboriginal research environment and how both epistemic traditions shape research methods, attitudes, and skills. This experience is interpreted through the perspective of Ewelina's life and education in Poland and her subsequent education in Canada. Ewelina speaks from a unique epistemic vantage point that is vastly different from the dominant Canadian epistemology. From this come the central elements of Ewelina's lead that speak to the ability of

Aboriginal knowledge and methods to promote an attitudinal and skill-set shift that will be necessary for the next generation of researchers who will face a vastly different research landscape.

John's voice calls back to expand on and connect Ewelina's experience to a cultural context. This elaboration comes from the perspective of a Mohawk man, a northern traditional dancer, a research officer working in an Aboriginal research center in a university environment, and finally a doctoral student. In many instances our shared song has been disharmonious, slightly off-beat, not so much a convergence of thinking as a reflection of dualism, certainly existing in parallel, but periodically converging at a place of common understanding born of reciprocity.

Our shared song casts light on the disconnection between what purports to be important in the experience of research assistantships (R-Aships) in graduate education and the lived experience of one graduate student engaged in both mainstream and Aboriginal research. It is this disconnection, between what graduate education is and what graduate education needs to be, that is crucial to maintaining a continuum of innovation that is fundamental to the ever-expanding knowledge-based economy and, of course, the society of Canada.

Writing on this same subject David Naylor (2007), President of the University of Toronto, believes:

We can't achieve the necessary expansion in graduate education without a serious rethinking of how we organize and diversify our institutions of higher education on a regional and provincial level. Canada needs graduate-intensive universities educating a talented global citizenry. (p. A23)

Our song offers a possibility of *how* RAships, this critical element of learning, might be organized around an Aboriginal-informed experience.

Ewelina's Call

As I reflected on my Polish and Canadian education experience, at a certain point my frustration became determination and gave me strength to continue. I believe that my perspective is somehow unique. I am able to interpret educational research and RAships through two diverse epistemic lenses. Having come from a pedantic, teacher-centered, male-dominated society to a Western society that purports to value critical thinking, collaborative knowledge-building, all the capacities and abilities that are necessary for a knowledge-based economy, also makes my perspective holistic.

I am an immigrant and a mother of a daughter who is now 12 years old. I came to Canada 11 years ago from Poland. My Polish education began under a communist political system and continued under a postcommunist political system as the Soviet Union began to crumble.

The communist government came to power after World War II in Poland. During the communist epoch (1945-1989), democracy, tolerance, and freedom to express ideas and personality were very much suppressed.

In 1980 the Solidarity movement emerged from the chaos and demanded a complete restructuring of the old centralized system. This included a demand for democracy, personal freedom, modernization of teaching methods and curricula, and other changes related to the educational system.

There were no major changes until the fall of the communist system in 1989. In this postcommunist environment, fundamental changes to education began to unfold. Major reforms involved profound changes in the school structure, curricula, and evaluation. Although I was only 7 at the time, I can vaguely recall the TV coverage and parents who protected me from the politics of the day. I recall the intensity in the family and the quiet hopefulness as people waited for change to happen.

My scholastic experience began in 1979 under a strict communist system. As a young student, I had little awareness of the political system or its effect on my education. This analysis and understanding came many years later when I recognized that I was not allowed to express divergent beliefs or opinions freely. The student-teacher relationship was based on the input of indisputable information, approved by the state and reinforced by the threat of corporal punishment. Critical thinking or innovative ideas were never encouraged in the classrooms of my childhood.

Like all governments, the communist and postcommunist regimes used the educational system to maintain power by instilling their values and beliefs in the next generation of citizens, and they knew that the only way to achieve this was to educate the people (the leadership and the workers) in their approved ideology. This translated into authoritatively set ideals and norms that were instilled in all educational institutions.

Welcome to Canada

At the age of 23, with a 1-year-old child, I arrived in Canada, where my educational journey in a new tradition began. I realized later that the transition from one educational tradition to another was very rocky.

My Canadian learning experience began with English-as-a-Second Language (ESL) classes. The classes included learners from many nations, and we were all determined to learn the new language. It was a mild and subtle submersion into the new system because our progress and capacities were not judged or graded.

After a year of ESL classes, I decided to complete a few credits in order to receive an Ontario Secondary School Diploma (OSSD). During this experience, I realized that I had truly entered a foreign land. I was surrounded by students who were familiar with this new education tradition, for the most part younger than me, and I felt like an outsider. I did not feel part of Canadian education at all. The fact that I could not fluently express my thoughts made this experience challenging.

History classes based on facts and dates made me feel at home. If I had learned anything under the Polish educational system, it was memoriza-

tion. I could memorize dates, facts, and even stories with ease. On the other hand, in classes that promoted group activities, collaborative knowledge construction, critical thinking, and sharing personal experiences, I was lost. In these environments the expressions on my classmates' faces continued to erode whatever was left of my self-esteem. It seemed as if the harder I tried to express myself, the more humiliated and alienated I felt in my classes. The language barrier and the differences between the Polish and the Canadian education systems seemed impossible to overcome.

Thinking about those times now, I realize that this was the stage when I experienced real culture shock. These were dark times of feeling powerless and hopeless. I wanted to run away, just drop those humiliating classes and run, run somewhere where people knew my strengths. Horsman (1999) reflects precisely my struggle during those times "when feelings become too much, many learners 'leave' emotionally or in terms of attention. They are no longer present to learn" (p. 185). Yet I knew that completing those courses was my only way into the university, which promised a brighter future. That is the only reason I stayed.

Nonetheless, I completed the required credits and obtained an OSSD. After that I began my undergraduate studies. Finally, after a long time, I saw the brightness. For the first time I felt satisfied. I felt that all those painful moments had been worth it, and now I could collect the fruits of my persistence and effort. I hoped that from now on everything would be less problematic. Yet the challenging journey only continued.

Higher Education

My first not-too-clever move was the selection of courses. I decided to take a psychology degree because of my future plans to become a psychologist. In addition, I took two Italian classes. I spoke Italian before I enrolled in those classes and hoped that they would ameliorate the anticipated pressures from the English-speaking classes. Psychology class was a nightmare. I probably understood 20% of what was covered during the lectures, and the rest was endless reading at home. Seminars were even more frustrating. Not only did I struggle with the language, but I also continued to find difficult the collaborative discussion, group activities, critical thinking, collaborative knowledge construction, sharing personal experiences, and innovative thinking that were encouraged during the seminars. I was becoming better with English, but critical thinking was not a familiar concept to me. In my Polish education it was enough to learn what the teachers were saying. I did not have to question their knowledge or the facts they provided, just accept them as they were presented without further investigation.

I passed psychology with a *D*, but it felt like an *A*. In the other courses I was more successful. However, I did change my major from psychology to classics and Italian. I realized that psychology was out of my reach at that point.

I graduated with a Bachelor of Arts in classics and Italian. It took me five years to do so, because during my studies I also had to work to provide for my family. During those five years of my undergraduate degree, I rarely had the opportunity to develop research experience because all my energy was concentrated on improving my oral and written English-language skills. After my graduation I did not have any further educational plans. I was ready for a long school break. And yet it was not the end; the new chapter of my postgraduate education was about to begin.

Becoming a Researcher

With the encouragement of a good friend, I decided to volunteer in the Centre for Adult Education and Community Outreach (CAECO) at Brock University. She always spoke so highly about the Center and people working there that I decided to be a part of it.

At that time the Center was running a program designed to improve the research skills of newcomers to Canada. Here I actually discovered what research meant. I attended many workshops related to research, leadership, and other aspects of academic life. I received a level II certificate as an RA. This experience motivated me to continue my postgraduate education. In 2005 I applied and was accepted as a graduate student in Organizational and Administrative Studies in Education at Brock University.

As time went by, I discovered a passion for research, the value of critical thinking, discussion, group activities, and the power of expressing my own ideas. Unlike in my earlier Polish education, I began to understand what the common saying *Nothing is written in stone* meant. It opens the possibility for possibilities, for my own creativity, it implies a space for discovery. Furthermore, I gradually began to understand the need to adapt continually to a changing educational environment.

Meeting Aboriginal Peoples for the First Time

Located next to the above-mentioned CAECO was the Tecumseh Centre for Aboriginal Research and Education (TCARE), where I met many Aboriginal people and for the first time had a chance to learn a different Canadian history as well as a different culture, and their contemporary educational realities. After some time, I understood how Aboriginal values conflicted with mainstream education and research. I spent many hours listening to and reading about the struggles of Aboriginal children in Canadian education. Initially I was really surprised and shocked. I thought that only immigrants had to deal with these kinds of issues. I return to expand on the first encounter with Aboriginal people in detail below.

Graduate Work

From the moment I became a graduate student, I have worked as an RA in various departments at Brock University. Through these experiences I have increased my understanding of the research process. I also honed my research skills. Gradually I also began to question some aspects of these experiences and their contribution to my development as a researcher. For example, I have come to realize that knowledge generation is not the result of one person's effort. And yet for a long time I have felt like a shadow lurking behind the principal researchers.

Initially I perceived the position of RA as a practical and beneficial experience for students as well as faculty members. I believed that graduate students engaged in projects would develop valuable research skills and could participate in research presentations and publications as a result of their efforts. In exchange, the principal researcher would secure the services of dedicated students (Strike et al., 2002). With time, I began to realize that the relationship between researcher and RA is not always such a fair collaboration.

My first projects involved tasks such as photocopying, data entry, literature reviews, and transcribing. It was obvious to me that I had to start somewhere, and with no previous experience I would not engage in analysis or interpretation of data. Initially I was happy just to be involved in the project and have an opportunity to become a competent RA.

The next projects allowed me to be more fully engaged in the research process. I was helping with collecting data, entering data, coding, representing data visually, and statistical analysis. I was learning new skills, but something was still missing. I did not feel a part of the team. It was clearly time for reflection.

I realized that although I was engaged in a large part of the project, I was never engaged in the final stage. I was hired, I did my share of work, and then I was gone. Sometimes I was interested in how the project would proceed. I wanted to read the final paper or report. I also wanted to be recognized for my efforts.

Clearly my RAships generated a broad spectrum of competences where one task is not equivalent to the other. Conducting literature reviews and photocopying I would categorize as minor assignments; however, creating annotated bibliographies or statistical analysis or report-writing requires a higher level of skill and would seem to deserve a higher level of recognition. One might think that ownership and authorship would be adequately acknowledged and shared according to the contribution of the RA. Unfortunately, based on my experience, ownership and authorship are often subject to informal arrangements and the individual expectations of the primary investigator. Reflecting on my responsibilities and contributions to knowledge generation, I did not feel fairly recognized for the first two years working as an RA.

Generally I was thrown into the water and expected to swim with little support. Learning was not gradual; it was all over the place, from photocopying to statistical analysis. My lack of familiarity with statistical analysis coupled with the lack of training forced me to invest more time than I was contracted to do. Little training was offered; I had to rely on my abilities to develop the necessary skills. There was no group of researchers, and because of the time constraints there was little time for discussion or for going beyond the actual duties of the job. I was rarely able to hear about the entire project. I often felt that I was disconnected from the context in which the research existed, and I wonder how my experiences influenced my development as a researcher.

John Calls Back: Hewers of Wood, Drawers of Water

Ewelina's natural epistemic lens comes from her upbringing in communist Poland, and through her educational struggles in Canada, a new epistemic lens was formed. As a result of this Canadian experience, Ewelina has a heightened consciousness and an associated appreciation for the core values that create the supporting framework of her Canadian education experience. Ewelina also asks an important question about how effectively the research capacities and abilities of graduate students are built and how well this learning will prepare them to participate in the ever-expanding knowledge-based Canadian economy.

The pressures of contemporary global economics have relentlessly reshaped the Canadian economy over the last 30 years. As industry and manufacturing continue to move to developing nations in the never-ending search for the competitive edge, Canada has increasingly shifted into a knowledge-based economy where innovation is king. A recent report from the Conference Board of Canada (2006) sees innovation as the central component of not only business and industry, but all levels of the society.

[Innovation] is also critical to environmental protection, to a high-performing education system, to a well-functioning system of health promotion, disease prevention and health care, and to an inclusive society. Without innovation, all these systems stagnate and Canada's performance deteriorates in comparison with that of its peers. (p. 2)

Yet the importance of innovation to economic productivity and social prosperity is not reflected in Canada's performance. In 2006 Canada ranked 14th of 17 countries, firmly positioning the country fourth from last (Conference Board of Canada). The Conference Board would have us believe that the only mitigating factor between continued economic prosperity and the need to expand the nation's capacity to be innovative in the knowledge-based economy is Canada's abundant and low-cost natural resources and the ever-expanding needs of a resource-starved world. "Canada's reliance on natural resource products partially explains why Canada derives less of its revenues from innovative products" (p. 3).

Universities and Innovation

Expanding Canada's ability to innovate depends on highly educated people, and according to the Conference Board, universities are the lynchpin.

There is a direct relationship between investments in education, educational attainment, and economic growth. A recent multi-country study found that if the national average educational attainment level were increased by one year, aggregate productivity would increase by 5%. In today's economy this would be the equivalent of adding more than \$60 billion to Canada's GDP. Similarly, research suggests that a 1% increase in numeracy and literacy skills leads to a 1.5% permanent increase in GDP (Conference Board of Canada, 2006).

Similarly, the Association of Universities and Colleges of Canada (2006) links the importance of investing in university research to the creation of new knowledge and increases in productivity. Recognizing this connection between higher educational achievement and economic growth, business has invested \$5 billion, and the federal government has invested a further \$2.6 billion in university research in 2006 alone. This investment not only generates new knowledge, but also provides the impetus for the next generation of Canadian researchers to hone their talents and skills.

Social Sciences and Humanities Research Council

The connection between scientific research conducted at universities, the application of new knowledge, and a thriving economy is well understood. Less appreciated is the connection between social science and humanities research conducted in universities and the continuation of a thriving Canadian society. Research in the social sciences and humanities plays an important and measurable role in shaping the social fabric of Canada by clarifying the economics that underlie social/cultural realities like homelessness, immigration, Aboriginal issues, and literacy skills by enhancing discourse about these issues and proposing alternatives to these social realities.

The Social Sciences and Humanities Research Council (SSHRC, 2005) has repositioned itself from a research council to a knowledge council. This new vision is not only an exercise in the subtleties of semantics, but rather a significant strategic shift that parallels the ongoing expansion of knowledge-based economics in Canada and an increased focus on the application of research that demonstrates a "deeper concern for the impact of research—the important and often undervalued social, economic, and cultural 'outputs'" (p. 5). With this strategic shift comes an increased emphasis on interdisciplinary, multinational teams, alternative methodologies that engage communities as active partners in the research enterprise, an emphasis on building research capacities, and most of all the increased and rapid mobilization of knowledge to strengthen the social

fabric of Canada. These factors begin to be embedded as new programming is developed and were central to the creation of the Community University Research Alliance (CURA) in 1999 and the introduction of Aboriginal-specific programming in 2005 after an extensive dialogue with Aboriginal peoples (McNaughton & Rock, 2003). In this scenario, university professors will increasingly find it challenging to maintain the fine balance between teaching, research, and service. Writing about this shifting focus of the Canadian professorate, Sandy Hershcovis (2007), an assistant professor at the University of Manitoba, admits, "We have all been conditioned to believe that to be successful in our profession, teaching must take a backseat to research" (p. A11). As the relative importance of engaging in research increases in Canadian universities, professors will potentially have less time to teach; but more critically, they may also have less time to mentor the next generation of researchers through their meaningful involvement in their research, potentially impairing the next generation's ability to innovate. These added pressures will demand new tools, new skills, or the expanded engagement of undergraduate and graduate students. Most important, this new landscape will demand an entirely new philosophical understanding, but first it is necessary to make the existing philosophy clear.

In a recent article that reviewed the relationships between graduate education and innovation, University of Toronto President David Naylor (2007) wrote "We urgently need to drive up our output of master's and PhD graduates to catalyze the growth of our knowledge-based industries" (p. A23). Naylor's article is a tacit example of the unspoken acceptance of university culture as it pertains to graduate education that appears to be so out of sync with the needs of innovation. What Naylor fails to recognize is that innovation, the central pole that supports knowledge-based economics, is not just a quantity issue, but also a quality issue. Graduating more master's and doctoral candidates without the necessary skills and attitudes to flourish in a continual state of innovation is not the answer.

Convergent forces are significantly reshaping the social science research landscape, and I would add that this is especially important because this is the landscape that these future researchers must traverse, exist on, work on, and from which the next generation of researchers must emerge. Appreciating the rudiments of this emergent landscape and their interplay can assist in developing alternative approaches that enhance our ability to flourish in this new landscape. If we are to *rethink* graduate education, we must also *rethink* the role, experience, and ways of RAships and identify alternative philosophies that better support the requirements of the evolving research landscape.

Ewelina's Call: Experiencing Aboriginal Research

I promised in a section above to return to my experience of Aboriginal research and the effect that this experience had on me as an emergent

researcher. Over the past year I was involved in an exciting project through the TCARE that allowed me not only to acquire new research skills, but also to grow as a graduate student and future researcher. This project was different because it allowed me to engage in all aspects of the research process from project design to publication. I was part of the research community recognized for all my contributions. Furthermore, researchers went far beyond the actual project, providing valuable knowledge related to other aspects of academic life.

It was an empowering cross-cultural experience where I deepened my understanding of Aboriginal histories, cultures, and contemporary educational realities. By participating and observing Aboriginal research approaches and methods, I understood the struggles between the values of Aboriginal peoples in mainstream education and research; but most important, I felt connected to the entire project.

During this project I had an opportunity to be engaged in the data-collection and experience an Aboriginal *focus group*. I use this expression for the purpose of clarity for broad readership. In reality it was a friendly circle gathering of a dynamic group of knowledgeable people ready to participate in and contribute to knowledge creation.

The entire experience was about well-being. In fact a great deal of attention was given to the research environment. The choice of the location for the research project was close to the land in a rural setting favorable to relaxation and reflection. Feeling comfortable and welcomed was an important element for knowledge creation. It is not about time restraints, but about getting the most out of a research experience by giving those participating in the project—both researchers and researched—an environment that encourages their ideas.

We the researched and the researchers talked beyond the limitation of the project by sharing life stories and connecting on a personal level that opened doors to the future and created opportunities to collaborate outside the project. Everyone was involved and attentive to the experiences and thoughts of others. There was plenty of quality time to get to know each other; playing instruments and singing together in front of the fireplace in the evenings eliminated the intensity that I was so used to. It was a respectful environment with unity of mind and of spirit. The Elder involvement in the gathering added a unique dimension; the performance of ceremonies, sharing creation stories, and ever-present humor made this experience even more divine.

I felt safe, even though I am not Aboriginal, yet I felt that I was part of the entire community. No matter what happened I knew I could talk about it and seek support from my fellow researchers.

As the project moved from knowledge collection to evaluation and presentation of the findings, we had weekly meetings that we would start with prayers and ceremony. It set an amazing atmosphere for the meeting,

where we would freely share our ideas, thoughts, and accomplished tasks around the table. The voices of all were heard and respected. We were always thanked for our input and encouraged to express our ideas. Our diversity was our strength. We shared our knowledge, our experiences, and our ideas. Everyone made the project happen. We worked together, and we collected satisfaction together. Although each of us had varied tasks, we all collaborated and were aware of each other's contributions. It was a great learning process where we not only learned skills from our own tasks, but also had a chance to become familiar with other aspects of research. It felt like more than a team: we became a family with a common goal, looking in the same direction and singing the same song.

Throughout this project I understood the true value of participating in a collaborative research community and the importance of a dedicated researcher investing time to mentor and motivate the team. I think that a key to building research capacity and a healthy research culture is motivating all parties involved in the project. Motivation levels are higher when all team members participate actively in the research process and are recognized accordingly for their work. One way to motivate graduate student RAs is to create learning opportunities that fully engage them in the research cycle and then recognize their input and ownership. Furthermore, it was important for me to experience quality mentorship in order to be able in the future to transfer my research knowledge to the next generation of RAs.

As my research skills improved, so did my confidence and ability to conduct research on my own. My experience in two diverse cultural worlds, Aboriginal and mainstream, has been an important educational journey that has given me a greater appreciation and understanding of educational research. These projects led me to reflect on my entire experience as a graduate student RA and how it might be shifted to benefit development for the next generation of researchers. Not only did I learn about other cultures, but I also learned about myself. I was eager to learn more about Indigenous people, and I felt that others were willing to invest their time to get to know me. At the Tecumseh Centre I felt safe and understood. Here I broke out of my shell. I was encouraged to talk and reflect on my past experiences. I felt safe enough to talk about experiences that for a long time had been locked deep inside me. It was a liberating experience where step by step I put together all the puzzle pieces of my past education and was able to see the entire picture.

John Calls Back: Aboriginal Approaches to Research

The process of learning to adopt and enact what are essentially Indigenous to this territory, now known as Ontario, such as collaborative knowledge construction, critical thinking, cooperating in a group context, and the validity of her personal experience were hard-won skills for Ewelina because she came to them later in life and because those ideals contrast so

sharply with her Polish education. It is through this unique bi-epistemic viewpoint that Ewelina experienced a third Native epistemic tradition that created the supportive research framework that enacted exactly what she had learned to value in the university but was not reflected in much of her RAships.

Ewelina's immersion in this particular Aboriginal research project demonstrates the viability of Indigenous traditions and knowledge in a RAship that results in the enhanced skills and attitudes that are conducive to innovation. In many ways Ewelina's immersion in an Aboriginal research community is reminiscent of a community of singers engaged in a traditional form of singing. To achieve the primary goal of sounding like one voice, traditional singers must balance a multitude of influences: diverse personalities, the integrity of the words or chant, a defined tune, the style of song, a consistent beat, and keeping a responsive eye on the dancers. Similarly, Aboriginal researchers engaged in researching through culture balance an endless stream of similar variables, and when that balance is achieved all sing with one voice.

The dominant proclivity of Aboriginal research is to locate the entirety of the project in a community where the artificial hierarchies that dominate the current landscape between the researcher, or the RA, or the participant are minimized through the careful construction of a holistic working and living environment. This community construct cannot occur without recognition of the spiritual imperative, and in our understanding, this spiritual imperative is expressed through ceremony that precedes all aspects of the project, but the spiritual imperative is also expressed in other ways.

In support of our spiritual capabilities, the process of "giving the voice" is sacred work and as such, promotes the full expression of ourselves as spiritual beings. It connects us to our humanity as sacredness; it grounds and centres us to our own power. (Horsman, 1999, p. 212)

There is also the understanding that mutual kindness to all in the community has the effect of elevating the spirit of all. As our individual and collective spiritual integrity is strengthened, the all-too-familiar divisions in the hierarchy become thinner, more voices are heard, and a community dedicated to the possibility of hopeful change radiates from within the project. It is a community that demonstrably acknowledges all in face-to-face meetings, research weekends, or in text by recognizing all who participated by name. These demonstrations of civility, of respect, are firmly ensconced in Aboriginal traditions, but rarely visible in the dominant university research culture. The unspoken and unrecognized myth that prevails contends that research and the realization of (new) knowledge is somehow the sole and exclusive creation of the primary investigator.

This Aboriginal research reality takes on another appreciation and conceptualization of time as an investment. By creating time to socialize, time to share knowledge that might seem extraneous to the project by some, time to play together, time to eat together, and time to be on the land together, a communal research narrative is developed that is greater than the constituent elements of the spiritual, the physical, the emotional, and the intellectual realities of all.

Only under this carefully constructed framework can RAs begin to enhance all their soft skills—critical thinking, collaborative knowledge-building, collaborative attitudes, community connectivity—that are fundamental to innovation. I hear in much of Ewelina's story the fractured, decontextualized series of RAship activities that are sanitized of her human needs.

The Nature of Resistance

Resisting the inclusion of Aboriginal culture in the research enterprise is an environment that is dimensionally limited by the traditions of the university that are rooted in the European past, most unspoken, that continue to dominate and define university culture. This effectively pushes the human need to situate experience in a greater context to the margins of the environment in the interests of time, the centralization of power and control, or cost-effectiveness. As a result, the horizons of research relationships are extremely shortened, which further reinforces the myth of the benefit of compartmentalization in the monodisciplined university that negates the complexity of all human reality. As a result, diverse research teams that work across disciplines and/or faculties to bring the power of research to bear on the human condition become the exception rather than the rule.

Ewelina's Call—Conclusion

Does the predominant approach to RAships in graduate education develop the necessary skills and attitudes that are critical to a rapidly evolving research landscape? My experience indicates that bringing together the Aboriginal approach to RAships with mainstream ideas better addresses this emergent landscape.

The Conference Board of Canada (2006) lists the following key elements of the innovation framework: creation (generating new knowledge or significantly improving existing knowledge), diffusion (sharing knowledge), transformation (adopting or adapting knowledge for a specific purpose), value (creating social or economic value from transformed and used knowledge), and environment (fostering the overarching conditions that influence innovation). These elements interact with each other and are most effective when approached as a cycle that has the potential to frame some, but not all aspects of RAships.

In the Aboriginal research environment that I experienced, the RA is considered an equal, a source of talent and insight that contribute to the research, and each RA brings diverse strengths or values to the research community. Also, the real benefits of shaping RAships along Aboriginal cultural traditions address the whole individual. Valuing and including diverse voices, where mentoring is ever-present, grounding research in community is paramount, as are the spiritual, emotional, physical, and intellectual needs of graduate students that are addressed in a holistic, safe, and respectful environment. There are also the professional aspirations of RAs to consider including the fair recognition and acknowledgment of the collaboration between researcher and the RA, including opportunities to co-publish and co-present.

The ever-increasing ascendancy of a knowledge-based economy and a society that relies on a state of continual innovation is inevitable in Canada, and this reality will continue to remake the research landscape. This inevitability brings into question the effectiveness of RAships and the effectiveness of new researchers to traverse the ground of this new economy. New approaches that maximize the experience of graduate RAships around this emergent reality may well emerge from a fusion of the dominant approach and a more ancient understanding that comes out of Aboriginal cultures and traditions.

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