Atlantic Centre
for Creativity

creativity
matters

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CREATIVITY MATTERS IS THE JOURNAL OF ATLANTIC CENTRE FOR CREATIVITY,

a non-profit established to support and advance research, teaching, and learning. It promotes all forms of creativity, including problem solving, innovation, and entrepreneurship.

contents

The Atlantic Centre for Creativity started as an initiative to bring individuals together from diverse fields of study including the arts, sciences, business and entrepreneurship to investigate, research and share ideas about creativity as a growing force in today's complex and interconnected world.

  Promoting research and programing in creativity, organizing yearly events for sharing research findings and ideas, and forming partnerships across the Atlantic provinces and beyond are its three main goals. Individuals from any discipline or area of interest are encouraged to take part in the creative initiatives we organize each year. Please visit our website to learn more about us!

atlanticcentreforcreativity.com

Dr. Blatherwick teaches art, design and creative education in the undergraduate and graduate Education programs at University of New Brunswick. Her research interests include intercultural understanding, visual literacy, arts-based resource development, community arts, and creativity.

LETTER FROM THE CHAIR

As the chair of the The Atlantic Centre for Creativity (ACC) I would like to invite you to explore the unique and exciting collection of creative articles, interviews and links to videos presented in this inaugural issue of *Creativity Matters*.

The concept for this publication started as a collection of conference proceedings from the Creative Connections conference held in Fredericton, New Brunswick in 2019. In collaboration with Mary Stewart, a Fulbright Scholar from Florida State University, it developed into an online journal, featuring not only conference papers but also interviews

with creatives and video links to conference presenters. Kerry Lawlor, Graphic Designer and Web Coordinator at the New Brunswick Collage of Craft and Design was our designer, and Lauren Cosgrove served as the photo researcher and copy editor.

Creativity is coming of age. It is now being valued globally in many new and diverse ways. Journals that can highlight the research, ideas, teachings and new perspectives on creativity are needed more than ever to help lead the way forward. We hope you will find this journal informative, inspiring, and a catalyst for further creative conversations!

Lessons Learned from a Life with Music

ADRIAN M. DOWNEY, BA, BED, MAED, PHD

Adrian M. Downey is an Assistant Professor at Mount Saint Vincent University. He is Mi'kmaq (Indigenous) with family ties in the Qalipu Mi'kmaq First Nation.

OF BOXES.

Today, it seems like we are constantly trying to think our way out of boxes. A few examples from my own life and studies come to mind. The first example is the current movement around post qualitative inquiry (St. Pierre, 2018 & 2019), which seeks to move beyond the conventional structures of research. Writers within this paradigm propose that these conventional structures have succeeded in systematizing not only knowledge produced through research, but thought in general. In short, post qualitative researchers aim to think/write outside the boxes of research and to rethink that which is considered a given within Western society (e.g., Kuby, 2019). Another example of "thinking outside the box" is decolonization, which asks us to give up the Eurocentric structures of our living and thinking (Smith, 2012). Marie Battiste (2013) has called the manifestation of these structures in our thinking cognitive imperialism and said that we have all been marinated in it through the eurocentrism of the curriculum. This also calls to mind a third example: critical race theorists who have identified that racism (Ladson-Billings & Tate, 1995) and settler colonialism (Brayboy, 2005) are endemic to Western society. The status of these ideologies as endemic constitutes yet another set of boxes which, in my mind, we are collectively trying to move beyond.

I have spent most of my adult life trying to escape structures that have been deeply engrained in me through my upbringing. As a teacher, I sought to unlearn the way I was taught in order to better address the learning needs of the students with whom I worked. As an Indigenous person, I have tried to move beyond those colonial ideologies that teach me to hate and fear myself—what those who study Frantz Fanon (2004) might refer to as internal colonization (see also Pinderhughes, 2011). As a graduate student, I have tried to work collaboratively within a system predicated on competition that feeds the egos of the successful. Each of these journeys of unlearning might prove an interesting and enlightening tale, but here I will focus on the same unlearning process as manifest in music—my first and most persistent love.

In the remainder of this piece, I will share my history with music and several lessons on creativity I have learned throughout my musical life. More specifically, I will address three themes through musical examples: 1) the efficiency of love, 2) process over results, and 3) the problematic role of ego in creation and learning. All of these themes tie into the larger project of my musical journey, which has been the pursuit of pure improvisation—music created in the spur of the moment without any adherence to the conventional structures of music. Through this piece I hope to offer wisdom garnered from a life of trying to think/play/live outside of musical boxes. I offer this wisdom to those who might be likewise engaged in trying to move beyond the conventional structures of thought within their respective disciplines. Though perhaps overly ambitious, this goal speaks to the current social moment where many of us are trying to escape convention—if not for our own sake, then for that of the planet and the coming generations.

OF LOVE.

We all begin our lives with music; we are brought to life through the creative power of our mother's rhythm—her heartbeat and the 9-month long rhythms dictated by ancient wisdom. As we grow, we remain connected in subtle, powerful ways to the creativity potential of the world around us. There is a rhythm to our growth, and no direction is required; we simply follow the plan of the universe into being. Gregory Cajete (2000) writes of the sacredness of our breath—when we speak, we bring the sacred wind within us into contact with the world's wind and create new possibilities through the union. There is cosmic creativity within the miracle of our speech, and as we learn our first words, we do so playfully with the loving guidance of experts all around us (Wooten, 2008).

My interest in music began shortly after I could speak. My uncles, aunts, and cousins were musicians, and I was always transfixed by the way the air moved around and through them as they sang. My mother sang often, and when we went to church, sometimes I sang along. In retrospect, these moments hinted what would become a full-blown obsession later in life. At the time, however, I like to think that I was drawn to the magic of life, and music was simply the loudest form of that magic.

I started guitar lessons at 11, but as is often the case in starting something new, progress was slow going. Around 13, I began lessons with a local jazz musician. Although I had not shown much interest in jazz at that point, my instructor encouraged me to start thinking about improvisation. Improvisation spoke to me in a way that nothing else had and, from then on, the amount of time I spent with a guitar in my hands expanded exponentially.

I loved that things were always different. I loved the intellectual challenge of it. Most of all, I loved the *feeling* of it. When improvisation went well, everything else melted away and there was nothing except a feeling of unrestricted emotion—something I could never really put into words, but which nonetheless captivated my full attention. Looking back now, I think I was tapping into the natural creativity of the universe—I was feeling my way outside the boxes of our everyday perception into what Maxime Greene (1995) might call wide-awakeness. When improvising, I was awake to the magic and creativity all around us.

Education does not always allow us to be awake. It has been obsessed with efficiency since Franklin Bobbit and his contemporaries brought forward the idea that building social or occupational efficiency ought to be the focus of curriculum (Null, 2010). Today, we see this in education systems as movements toward standardization, accountability, and data-based decision making—all of which ultimately aim to keep education running as efficiently as possible. Recently, Dr. Ashwani Kumar drew on the spiritual thinker Jiddu Krishnamurti in order to speak back against this cult of efficiency when he said, "love is the most efficient thing in the world" (Kumar in Kumar & Downey, 2019, p. 110). Love is what I was tapped into at that early age. During most of my teenage years, music was all-encompassing. I spent the better part of twelve hours every day engaged in music: early morning concert band rehearsals, spare periods and lunch times spent in practice rooms, weekend and after-school jazz band or drumline rehearsals—not to mention the punk bands I played in with my friends and the hours I spent practicing on my own. I spent so much time in my high school music room that, after I graduated, my music teacher named a practice room after me— "Downey's Den," the plaque indicated. It was all very efficient in terms of my learning of music, and it was not a standardized curriculum measured by educational objectives. I was engaged in a curriculum of passionate learning driven by my own curiosity and desire. The first lesson from my life in music is this: "Love is the most efficient thing in the world" (Kumar in Kumar & Downey, 2019, p. 110). We do not always need to measure or objectify our learning; sometimes it happens faster if we just let it unfold and follow our intuition. If we are fully awake, as when we are in love, we will learn in every direction.

OF PURE IMPROVISATION AND UNLEARNING.

 In university, I continued my love affair with improvisation. During classes, I learned the theory of western classical music and jazz. I tried as much as possible to integrate these theoretical understandings into my playing. Recognizing patterns became the key to success. Scales took on particular shapes and could be moved to different positions on the neck of the guitar in order to play in a particular key. If I looked at a sheet of music and saw that it was in the key of B flat, I could take my 3 favorite patterns and move them to the 6th fret. Within those patterns, I was free to improvise, but as the music I studied became more complicated, I began to see limitations in this approach.

 In one lesson, my guitar teacher provided a few alternatives to thinking in patterns—focusing on melody, rhythm, or massaging notes into tonality (like repeating a word over and over until it takes on a new meaning). In all of these, however, I saw only limitations, and I openly lamented the necessity of playing the "right" notes. Thinking about which notes to play took away from the feeling of improvisation, I argued. I told my guitar teacher that I was interested in chasing pure improvisation—music beyond the structures of music. To my surprise, he understood immediately and, perhaps more importantly, *he got out of the way*. From then on, rather than showing me songs, scales, or chords, we spent our lessons speaking the language of music. He thought of it as an exercise in "free jazz"; I thought of it as connecting to each other and to the divine.

 Thus began my process of trying to unlearn the patterns that had been absorbed into the fabric of my being. Patterns get down into the bones of us. Here, you may think of neuroplasticity (Arrowsmith-Young, 2012), social conditioning (Krishnamurti, 1992), or colonization (Battiste, 2013; Fanon, 2004; Pinderhughes, 2011; Smith, 2012) as explanatory examples, but the core of the idea is that that which we do over and over again begins to define what we are likely to do and what we are likely to see in the world. These are boxes of thought. In music, the boxes of thought are both cognitively and physically manifest. Susan Langer notably referred to musical knowledge as non-discursive knowledge because of "the ability to create through the application of technique and skill forms whose empirical structure echoes the structure of a form of feeling" (Eisner, 2008, p. 8; see also Langer, 1951). My journey in pure improvisation was a movement away from placing my feeling or emotion into any preconceived structure. I wanted what I had achieved in my earliest moments of improvisation: a feeling of unrestricted emotion. I wanted to be awake.

To be clear, for me, pure improvisation meant no scales, no tonal centers, no chord changes, no patterns, no repeated rhythms, no "wrong" notes, and no rules. It meant radically moving away from what was considered music, and doing so at the speed of thought. This process of unlearning is still in progress. I have spent time unlearning scales, harmony, rhythm, and accepting music that does not sound "good", but I have not been able to break away completely—my fingers still move in too familiar patterns, my body still feels the pulse of rhythm even where none exists, and my face still wrinkles uncontrollably at unexpected dissonance. Some of my fellow musicians have said that pure improvisation is too abstract a concept to actualize, and that I should focus on learning scales and patterns to the point where they do not feel like scales and patterns. There is, perhaps, some wisdom in this advice, but I think the point is the process, not the destination. Through the process of unlearning the conventional structures of music, I am constantly trying to work my way out of a box, and although I may never get there, I am changed by the trying.

My second lesson is this: *just because something seems impossible, does not mean the process won't teach you something important.* This lesson is particularly important where decolonization and antiracism are concerned. As alluded to in my introduction, racism and settler colonialism are endemic to the fabric of Western society (Brayboy, 2005; Ladson-Billings & Tate, 1995); they form patterns that are often difficult to see beyond. The renowned antiracist philosopher Cornel West acknowledged the ubiquity of these ideologies by pointing to his own racism and further articulated the movement forward as our responsibility to "die daily"—to let the racist/racism in us die a little bit every day (West, 2015). Reconciliation, Indigenization, and the end of racism are lofty goals which need to be tackled on a structural level, but for me these processes begin with internal, individual change. So, I remind you, *just because something seems impossible, does not mean the process won't teach you something important.*

OF EGO AND IDEALS.

When I began down the path of pure improvisation, there were many skeptics. This was probably because, by conventional standards, the results of my thinking sounded terrible. My friends stopped calling me to play with them. The offers of paying gigs halted entirely. When I did play in public, the reaction was visceral and negative. Though I expected these reactions, they forced me to wrestle with my expectations for myself. Up to that point in my life, my goal had been to be a great musician. I wanted to be respected and admired for my ability. I had constructed an ideal of what a good musician sounded like, and I tried to sound like that. In so doing, I lost touch with my internal sound—the vibrations of my heart-song. I lost touch with who I was in favour of the ideal sounds held by society; my ego-song was obscuring my heart-song.

Ashwani Kumar writes about this distance from oneself outside the context of music. For Kumar, "once we look at ourselves with an ideal in mind, we have already gone against ourselves" (Kumar, 2013, p. 8). In other words, we ought not to view ourselves through the lens of how we should be, but rather try to accept ourselves as we are—in the process alleviating the suffering of trying to become other than what we are. Where music was concerned, I became disinterested in living up to anyone else's preconceived notions of what constituted good music. I was interested in connecting deeply to the music within me, and in so doing, I had to shed the ideals, patterns, and conventional thought process of Western music. Stepping away from my ideals about what made a good musician and connecting to my heart-song was a spiritual movement away from the egotistical world of profes-

sional and academic music. It was a decision I made because of love, but it was a decision made later than I would have liked.

After I finished university, I spent two years teaching in Northern Quebec. There, I played music daily, though never in public and always alone. Sometimes I played for the students I taught, but mostly music was a personal pursuit, and so it remains today. When asked by my colleagues why I did not play in public or offer lessons, I told them that Music and I had been in a dysfunctional relationship for the last twelve years. Just like any relationship, hurts had built up over time—careless words said in haste, unacknowledged emotions, and moments when we had let each other down. Music and I needed to spend time fixing the little hurts that had built up between us. Perhaps, more accurately, I had to heal the wounds of my ego from twelve years of playing music for the wrong reasons and reconnect to my heart-song.

My third lesson is *sometimes we need to get out of our own way* to experience the efficiency of love and to work our way out of our social conditioning. In music, getting out of my own way meant realizing that it did not matter if I was a good musician or a bad musician; it mattered that my playing was making me happy and that I was growing through my playing. If we want to think, do, be, or play something new, we have to move against the rigidity of that which already is, but in so doing, it is easy to think oneself a failure—living against the dominant culture is not easy. But if we detach from those ideals that have been enforced on us, we might be able to step outside the boxes of convention without experiencing paralyzing self-doubt. Sometimes *we need to get out of our own way*.

OF DISCOMFORT.

 Today, music is still a part of my daily life, but it is a deeply personal, spiritual practice. Professionally, I spend most of my time thinking about teaching and learning, particularly in the context of antiracist and Indigenous education. In addition to the lessons I have shared above, my lived relationship with music has taught me that there is value in being uncomfortable. It was uncomfortable for me to step out of the world of professional music, but in the end, it gave me the chance to understand myself more fully. Love can be a powerful motivator toward this kind of change, but it will not exempt you from the discomfort of a new experience.

 As discussed, racism and settler colonialism are boxes into which our thinking and our actions fit. Stepping outside these boxes to appreciate the beauty and brilliance of perceived "others" can be difficult and uncomfortable. Taking one step further and speaking back to the systemic inequalities can likewise be an uncomfortable transition from complacency. Embracing our discomfort, however, lends itself to the kind of self-transformation that our society needs in the current moment. Thus, the final lesson music has taught me is to embrace the uncomfortable frontiers of experience, and let a love of life and a desire for authenticity over efficiency be the driving forces behind all that I do. ■

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Brigitte Clavette

Since 1988, Brigitte has served as the senior Instructor and Studio Head (Jewellery/Metal Arts) at the New Brunswick College of Craft and Design. She is the recipient of many awards from the Canada Council for the Arts, Arts New Brunswick, The Strathbutler Award and the Award of Excellence in Crafts from the Province of New Brunswick. In 2017 she received the inaugural Fredericton Arts Achievement Award. In 2018 and 2019 she was nominated for Bronfman Award from the Canada Council. Her work is in private and public collections, most notably the Royal Ontario Museum, Victoria and Albert Museum-London England, the MacDonald Stewart Art Center (Art Gallery of Guelph), the New Brunswick Museum and the Province of New Brunswick. She was inducted into the Royal Canadian Academy of the Arts in 2000 and became a Fellow of NBCCD 2019.

INTERVIEW CONDUCTED BY MARY STEWART
PHOTOGRAPHY BY DREW GILBERT & BANG-ON PHOTO

MS: TELL US A BIT ABOUT YOUR BACK-GROUND. WHERE DID YOU GROW UP?

BC: I grew up in Edmundston, New Brunswick, very near both Quebec and Maine. My father was a hospital engineer and my mother was a bartender/restaurant owner. As one of six children growing up so near the border, I quickly developed an open mentality.

MS: YOU BEGAN YOUR STUDIES AT NOVA SCOTIA COLLEGE OF ART AND DESIGN AS A PRINTMAKING MAJOR. HOW AND WHY DID YOU SHIFT TO METALSMITHING?

BC: As I learned etching, I became more and more interested in the copper plate itself, rather than the print it could produce. I always loved working with my hands, and the tools and processes of metalsmithing were the perfect match for me.

MS: IT SEEMS THAT TWO TEACHERS WERE ESPECIALLY INFLUENTIAL FOR YOU.

BC: Yes. I studied with Lois Betteridge when she came to give a workshop at NSCAD in the mid 70's and later I hosted her a number of times to teach my students at the New Brunswick College of Craft and Design. and still consider her my teacher. We create work for exhibitions in a group called Metal Collective. She is a metalsmithing master, especially known for her silver raised forms. When we talk on the phone, I can hear her hammering away, even in her nineties! She helped me develop a solid understanding of both technique and of concepts. And, what a work ethic!

The other most influential teacher was Heikki Seppa. Working with him at the Haystack Mountain School of Crafts in Maine opened my eyes to a wide range of new techniques and ways of thinking. Heikki had developed metal forming techniques that allowed for faster results in creating form with sheets of metal. He had published "Form Emphasis for Metalsmiths" and it was a privilege to have the chance to spend a couple of intense weeks in the same studio.

MS: HOW DID YOU GET INTO TEACHING?

BC: From 1983 to 1988, I had a studio and bed and breakfast in St Andrews, near the coast. At craft fairs, I began noticing people examining my work with extra care and I wondered why. It turned out that they were looking for a new metalsmith at what was then called the New Brunswick Crafts School. I was offered a job and am now completing my thirty-fourth year at New Brunswick College of Craft and Design.

MS: YOU SEEM AS DEEPLY DEDICATED TO TEACHING AS YOU ARE TO YOUR STUDIO PRACTICE. WHAT HAVE YOU GAINED FROM TEACHING?

BC: Yes--and for these many years, I have really spent as much or more time on teaching that in my studio. This is shifting, as I wind down the teaching and gear up the studio work.

From teaching, I have gained a deeper understanding of technique, composition and concepts. You really have to know what you are doing before you can explain it effectively to someone else! I also gained greater awareness of the unique vision of each student and a capacity to hold my tongue when needed and to speak forcefully when needed--especially when working with administrators. They cannot possibly know the specific needs and concerns of each program unless those working in those programs speak thoughtfully and effectively.

MS: AND, YOU HAVE TRAVELED WIDELY. WHAT HAS THAT CONTRIBUTED TO YOUR THINKING?

BC: During my three years in the Arctic, I learned a lot about the culture and habits of our northern family. I also was forced to understand the difficulties and rewards of place, distance, isolation, simplicity. From my visit to Haystack, in addition to my work with Heikki, I learned that no matter how established or emergent you are in your art practice, that everyone in the incubator studios are all on the same level, willing to share and work together in a highly creative environment. This is a reflection of the wonderful job that this institution has done for decades. Even seemingly modest trips, such as my recent trip to Quebec, can be pivotal. During that trip, I visited Kamouraska where I participated in a Collaborative residency, (K18) where I did not work in my own medium. This was an open, multi-disciplinary event. Openness to experience and curiously are essential aspects of creativity, it seems to me. This residency saw me working with wood, glass and fiber as well as with base metals.

MS: YOUR RECENT WORK SEEMS TO COMBINE INFLUENCES FROM BOTH OF YOUR MAIN TEACHERS: IT IS SIMULTANEOUSLY TRADITIONAL AND EXPERIMENTAL. WASTED-1861 GRAMS STERLING SILVER IS A GREAT EXAMPLE OF THIS.

BC: Yes. This artwork combines two polished and technically traditional silver vessels with tarnished "skin" forms cast from discarded foodstuff and found objects: the detritus of the everyday. Arranged like a centerpiece for a fine banquet, the metal objects sit on a brush and ink drawing, further challenging our traditional expectations for metalsmithing.
I am now preparing works for a solo exhibition at the New Brunswick Museum in 2020, titled Futile Abundance. I expect each artwork will offer a series of contrasts between desire and repulsion, drawn marks and sculptural forms, polished and tarnished objects.

MS: WHERE DO YOUR IDEAS COME FROM?

BC: My creativity has on a few occasions been spurred by a personal trauma, one example being the death of my partner in 2003 which led to an extensive "sacred heart" series, combining ideas from Catholicism and Buddhism. The loss of my brother sent me to create an exhibition of large incense burners. And, my highly experimental work process results in endless variations on each theme. Each artwork I make suggests many further possibilities.

MS: WHAT ADVICE DO YOU GIVE MOST OFTEN TO YOUR STUDENTS?

BC: Think with your sketchbook, be curious, put in the labour, find passion, go to the library and look at real books, work with the tools you have. Buy a bench pin and get to work at the kitchen table, the tailgate of a truck, at a picnic table…no excuses.

MS: AND, WHAT ADVICE DO YOU GIVE TO METALSMITHS JUST STARTING OUT IN THE PROFESSION?

BC: A metal studio is not for everyone, make sure you love the relationship with the tools, machines, fire and hours of labour to master your techniques. It can be very rewarding. ■

# Tracking Creativity to Teach Creativity

DR. DEAN VERGER

Dean Verger is a course instructor at Carleton University. He has his HBA in Business Administration from the University of Western Ontario, and his PhD in Cognitive Psychology from Carleton University. Besides helping his students learn, Dean is also a raconteur who presents oral adaptations of novels such as Moby Dick and his own short stories.
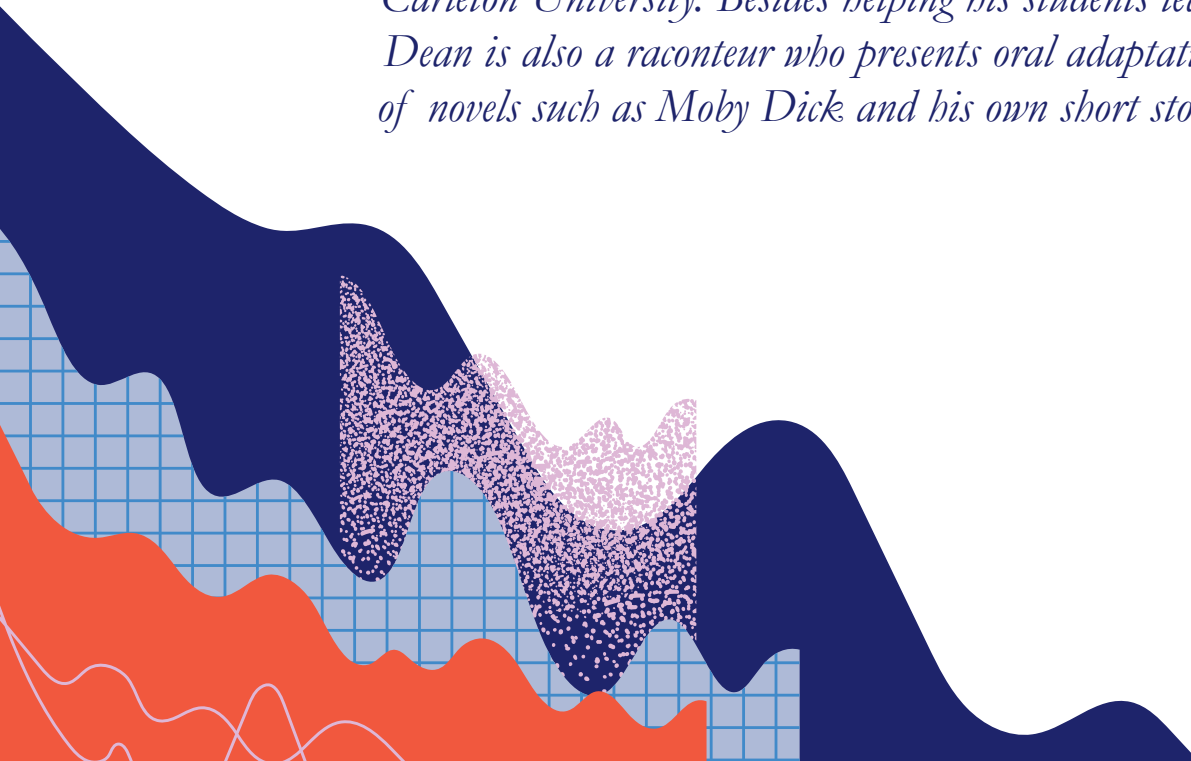
Before teaching at Carleton University I had spent 28 years promoting and developing artists at a small café I owned and ran in Ottawa. I perform as an artist myself, and have toured my shows in Ontario, Alberta, and British Columbia. Creativity has been a mainstay in my life, and the lives of people with whom I associate.

So, when I was asked by the psychology department at Carleton University to propose a new course, I immediately began developing a new course on the psychology of creativity. This course gave me a chance to combine knowledge I had gained through my degrees in psychology and business administration with my years of experience in the arts.

> Creativity has been a mainstay in my life, and the lives of people with whom I associate.

But how could I teach the beautiful topic of creativity, analyze its components in an academic setting, and still keep it interesting? On the one hand, the general public seems to have a simplistic view that creativity is the domain of geniuses born with this ability. On the other hand, to explore every contributing detail in isolation can sap the joy out of this subject and leave students with a collection of unrelatable facts. Hofstadter (1979) argued that the more we try to be precise in our definition, the more we can miss.

I concluded that we needed to regularly change our focus from the micro to the macro, zooming in on some topics, and then zooming out to see the whole. By examining creativity through both theory and practice, I believed that students would learn more and become more deeply engaged.

The first year I ran the course, I followed the general pattern of fourth-year university seminar courses. The course included lectures, student presentations, guests, and the usual summative marking schemes. We explored up-to-date research on creativity through lectures and presentations--but the amount of student interaction in the class was sadly low.

With the second year I added a term-long project: the development of a new game. Three primary criteria were stipulated from the start. The game had to be: 1) for elementary-school-aged children; 2) incorporate full- or partial-body movement; 3) be inexpensive. Implicit to these criteria, the game had to be playable.

Why develop a game? Creativity is aided by a sound knowledge of a domain (Baer, 2015), and most students bring a ready-made level of expertise with their existing experience with games. Though there were no grades for the project, we talked and shared. Student involvement in the class substantially increased over the previous year, but fewer than half the students engaged in the journal-writing in a substantive manner.

So, in year three, I made the journal an integral part of the learning experience. This resulted in a profound increase in quantity and quality of work. Team interactions were enhanced and analyzed. And individuals were better able to integrate knowledge from readings and presentations into in-class discussions.

The class format evolved as well. The lectures, student presentations, guests, and summative marking schemes I used initially were supplemented or even replaced by more field trips and hands-on work. For example, one three-hour class (which we held in the Carleton University Art Gallery) focused on an exhibition titled *Sites of Memory: Legacies of the Japanese Canadian Internment*. In preparation for the visit, my students read relevant information about the Second World War. Norman Takeuchi, one of the visual artists whose work was on display, was our guest speaker. He had been a young boy during the internment. After viewing the show and listening to Mr. Takeuchi, the students initiated a lively question and answer period. Two of the main points Mr. Takeuchi made were that he painted each day because he felt an internal drive to do so. And that art was a lot of effort, with many iterations of each piece to achieve his goals. I actually had to bring the questions to an end, in part out of respect for the age of our elderly guest, and in part to proceed to our next task: a hands-on collage.

Inspired by a T.M. Amabile (1983) experiment that used collage-making as a vehicle to investigate the role of motivation in creativity, each student was provided with an identical package of material. The package contained the same mix of paper, cardboard, cotton balls, newspaper, and magazines. The students shared the same markers, glue sticks, and scissors. The students were instructed to have fun, to be creative. In no time, they were quietly concentrating on their own individual works of art; the tables and floor were covered in a growing collection of bits of paper. When told there were three minutes left, the class cried out, and negotiated for more time.

The participants in the original Amabile (1983) experiment had been two groups of children who took part in the craft event on two separate days. Towards the end of each day the two groups were given the same materials and asked to make collages (just as my students were). Both groups were invited to be creative. The first group of collage-making children were told before the task that there would be a random draw for three prizes. The second group were told that the three prizes would go to the best creations. The artwork of those who were instructed to have fun were more creative than those who were told that their work was being evaluated. Motivation mattered, intrinsic won out over extrinsic. But how does one judge creativity?
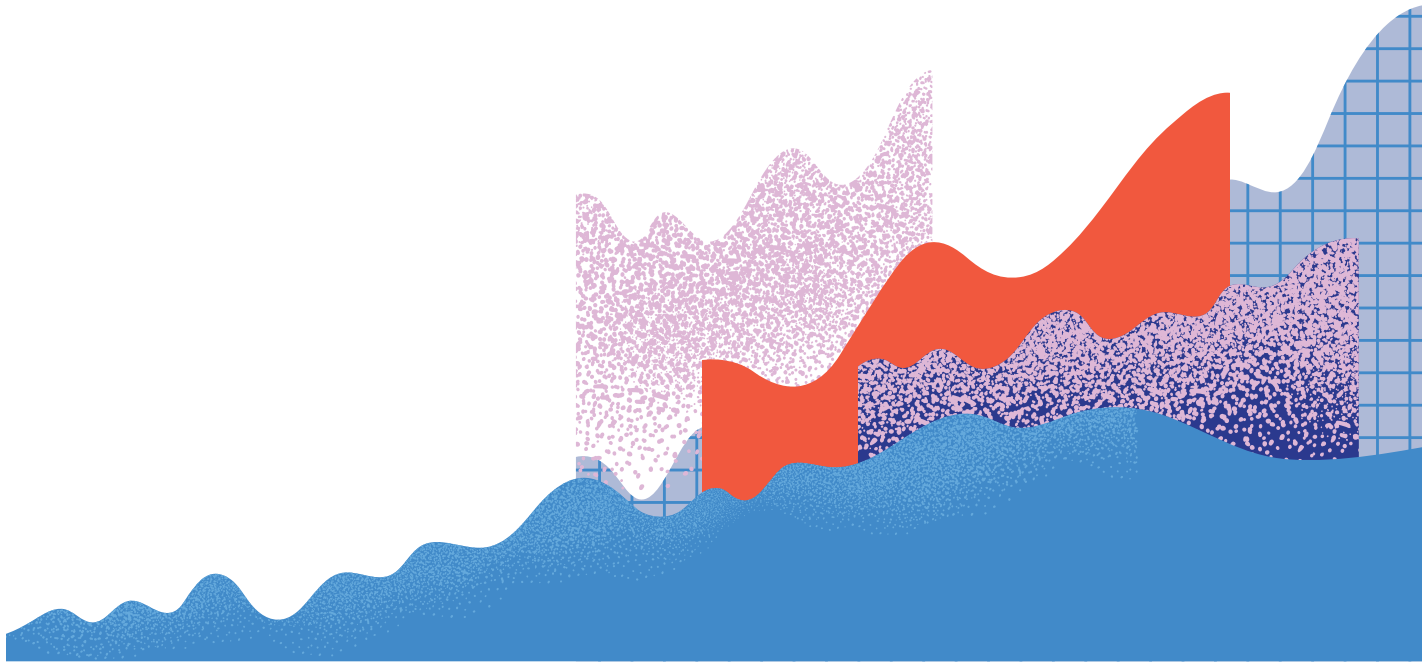
Through this exercise I was able to introduce the class to Amabile's (1982) Consensual Assessment Technique. At its heart, this is an elegant solution to judging creativity. Amabile recruited seven visual artists, experts in collage. After the children had left, each of the artists independently rank-ordered the full set of collages. Without knowing the children, or the task conditions, six of the seven artists provided the same rank-ordering of collages. They agreed which pieces were the most, and the least creative. Through both the gallery visit and the collage exercise, experience became attached to theory.

The following is a description of the course as it is now structured. After the description, I will detail the first three weeks of our 13-week course, describe the role of journaling, and note the changes I have seen between the versions of my course.

The Psychology of Creativity looks at the topic from the many lenses that exist in the field: cognitive science, forensic, mental health, and cognitive psychology, including personality, intelligence, insight, incubation, and spreading activation. Readings on cultural transmission, subtypes of creativity, the metrics of creativity, and even non-human animal creativity create a rich body of knowledge.

Figure 1. Model of the Creativity Course
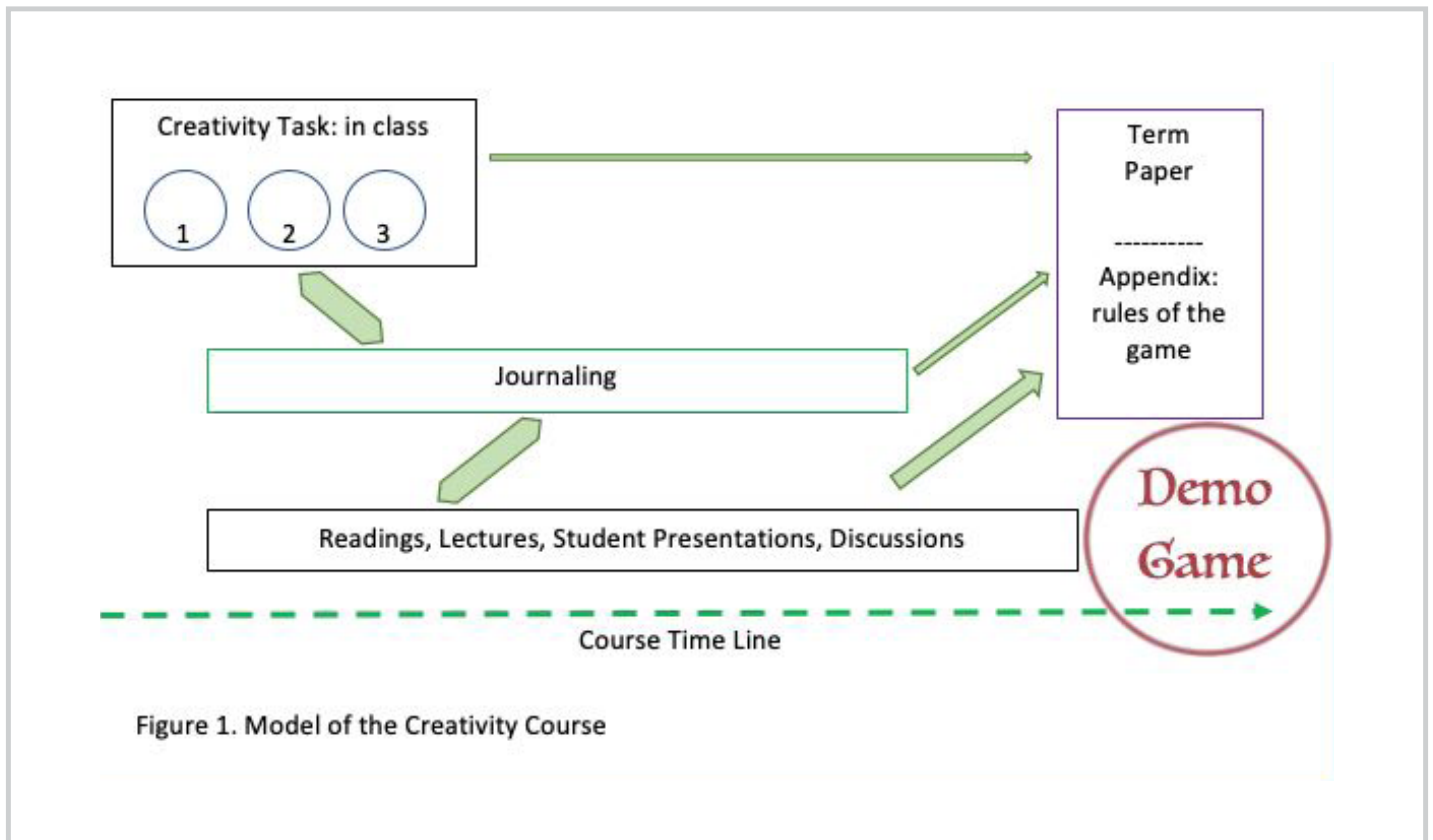
A visual metaphor (shown in figure 1) can help to describe the arc of the course and the role that journaling plays both in the major assignment and in the gaining of understanding. Over the first three days (one class a week) students are given in-class time to come up with a new game. Their thoughts and game ideas go into the journal. In parallel, the students read various articles, including Claxton, Pannells, and Rhoads, (2005), Smith (1995), Wynn and Coolidge (2014). The Claxton et. al. (2005) article investigated the drop in measured creativity in the fourth grade. The Smith (1995) chapter examined the concepts of incubation and fixation. Of most interest to my students was the Wynn and Coolidge paper that looked at serendipitous error, fiddling, and procedural drift as possible sources of creativity.

Each week the students add a 250-word reflection to their journal. This reflection relates the research findings to their personal experiences of trying to develop a new game. The game development, the journal, and the readings all inform each other.

Toward the end of the course, the students must submit a term paper. The term paper explains the present state of creativity research. The students use their own experiences (retrieved from the journal), as examples to support and explain concepts such as climate and culture in the workplace or in our specific situation, in our course itself (Isaksen, Lauer, Ekvall, & Britz, 2001). A description of the game and its rules are added as an appendix. After the term paper has been submitted, the students get to play the games they have created.

Getting off to a strong start is essential since the first three weeks of game development provide a springboard into the course as a whole.

On Day One, I provide the students with a journal. They are invited to personalize the journal, to make it their own. They are encouraged to use the journal to record their ideas and thoughts on the development of the game. These entries must be dated. The first task for the journal is to list independently as many

games as they know. The purpose of the list is to prime their thoughts towards games. We then take a mental break and switch our focus to course-related materials, such as the history of creativity research. We then return to the journal. I now ask students to continue working on their own, but this time I want them to come up with a new, inexpensive game for elementary school-aged children that incorporates movement. Students are invited to continue thinking and working on their game through the week. Whenever students have ideas the students are asked to make note of them in their journals, including the date of the entry. I remind them to write the required 250-word reflection on how that week's readings inform their game-creating-experience.

On Day Two, I get the students to look at the back page of their journals where I had placed a decal before giving the journals out. Groups of four of the journals have the same sticker. Borrowing from the Jigsaw technique (Hedeen, 2003), I use these stickers as the discriminator tool to generate new groupings of students. Each person is provided time to explain their game idea (or where they are in the development of the game) to the small group. After they have shared, I explain that they each have a choice to make. They can merge and form a game development team; they can borrow ideas for their own game; or they can continue to work solo.

On Day Three, the students are told there is a new criterion: the game must be safe. This often causes an ideational hiccup; some games need to be redesigned. Half an hour of class time is set aside at the end of Day Three for the students to share their ideas as a team, or as a solo, with the class. Again, merging and sharing are encouraged.

Around Day Six, I ask my students if they have begun Beta testing their games. This encourages them to turn their ideas into reality, shifting from the conceptual to the practical. It seems to provide an additional level of meaning to their work, even though the game demonstration has been in the course outline since the beginning of the term and is voluntary. Journal reflections demonstrate that some of the students do test drive their games and then refine the practical details.
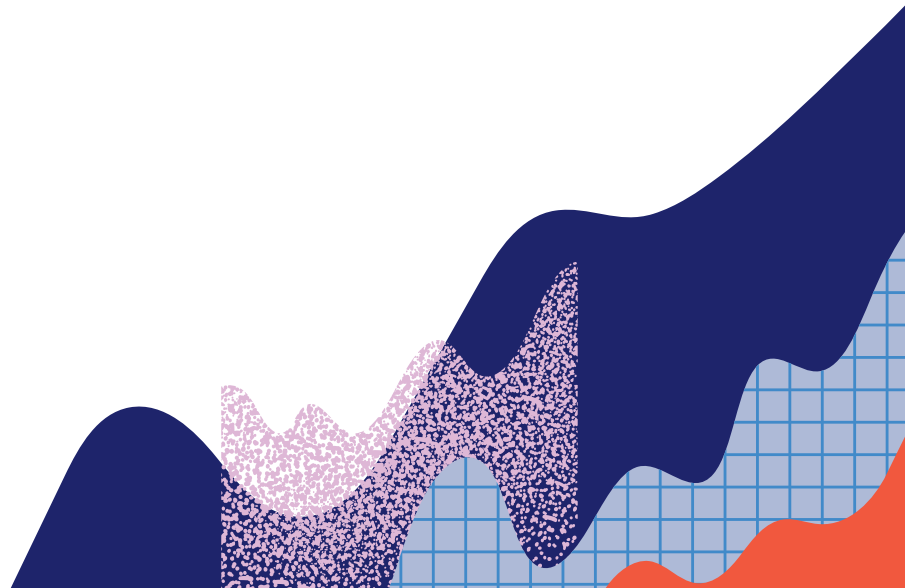
'Throughout the course, the students use their journal freely for reflections, note-taking, game development, doodling, and creating drawings of the game. Student reflections are sometimes bunched together or carefully organized into sections. At other times, they are drawn out across a number of pages, with game development ideas intermittently added here and there. Any approach that demonstrates consistent and substantial engagement with the readings and with the game is encouraged.

Because of this mix of theory and practice, students' term papers are now richer and in-class engagement is generally lively. And, the teamwork has encouraged an increased social element to the class. Even the shy students often speak up more when they are in small groups, and I also work with them individually to strengthen their confidence.

Overall, compared to the first two years of this course, the addition of a term-long project with a required reflective journal has added substantially to the students' academic achievements. They now integrate pivotal readings with game development and journaling. The readings provide context and the theoretical backbone for the course. The game provides direct experience with creativity. The journal allows each student to think further on the readings, in light of a project in which they are often personally invested. In addition to their direct experience in the course, I believe that students better understand and retain course content.

Finally, because there are no summative marks for the game, the students can really play with ideas, and enjoy the full process of creating something for themselves. As noted by one of my students, who was quite pleased with the game she had designed, "If I had been more extrinsically motivated, I would have been likely to use specific algorithms … rather than to test more innovative solutions". ∎

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The Pedagogical Power Of Fiction

ADDRESSING GENDER-RELATED
ISSUES THROUGH CREATIVE PRACTICES

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Esther Armaignac is a PhD student at the Department of Integrated Studies in Education at McGill University. Her research is built on several approaches such as critical media literacy, feminist pedagogy, and participatory action research. Her research focuses on the use of popular culture (movies, TV shows, novels) and creative practices in classrooms to encourage teenagers to develop critical thinking towards gender-and sexuality-related issues. Her goal is also to provide recommendations and for curriculum development, specifically in the field of sexuality education.

How can creative practices be used to engage teenagers in discussing gender roles, conventional narratives related to gender, consent and sexual harassment? Statistics show that one in three women in Canada will experience some form of sexual violence in their lifetime. And yet, only 5% of survivors report to the police, because of lack of trust in the criminal justice and court system (Weissbourd et al., 2017). This presentation focuses on why fiction is a relevant tool when addressing gender-related issues in classrooms, and more specifically, in sexuality education classes. First, I will explain why stories matter, and why fiction is a relevant pedagogical tool to address gender-related issues. Then, I will present the approach on which my research is built youth participatory action research. Finally, I will present an example of a fiction I wrote in a previous research; the goal of this creation was to explore an art-based method to address gender-related issues.

WHY DO STORIES MATTER? WHY USING FICTION?

Why are fictions important? What impact do they have on people? What kind of messages are they conveying? What is the difference between using fictions instead of non-fictions in classrooms?

First, fiction generates emotions. Umberto Eco studies the connexion existing between novels' characters and readers. His argument is that fictions are not necessarily less real than non-fictions. Eco explains there is a "pact" between the creator and the readers. Readers accept the reality of the characters. Even if characters are evolving in a world that is not "real," readers engage with them and the fictional world becomes "real". Accordingly, the fictional narrative brings the reader into a new reality (Eco, 2009). Fictions have the power to transport us into new worlds, and, in a way, we believe in these worlds. Readers feel connected to characters; they develop empathy towards them. Fictions allow readers to feel strong emotions: pain, sadness, happiness, stress, suspense, etc. Accordingly, fictional narratives are powerful tools, because they engage readers. Eco also underlines another important aspect of fictions; fictions allow us to think about our own reality, our own world. Fictions encourage us to question our social reality, through characters and stories.

This aspect highlighted by Eco is particularly important in the context of social change and social justice. Fictional narratives encourage us to question our world, including social norms and inequalities. Consequently, fictions can be used as powerful tools of resistance. Beyond allowing us to think about our own world, according to Patricia Leavy, fictions encourage us to resist dominant discourses. In her book *Fiction as Research Practice: Short Stories, Novellas, and Novels* published in 2013, Patricia Leavy explores the uses of fictional narratives as tools of resistance. As Eco, she believes: "The practice of writing and reading fiction allows us to access imaginary or possible worlds, to re-examine the world we live in, and to enter into the psychological processes that motivate people and the social worlds that shape them. In short, engaging with fiction our research practice creates innumerable possibilities" (2013, 20). Fictions engage us but also allow us to think critically about our own reality. According to Leavy, fictional narratives are powerful tools of resistance because they can "be employed as a part of a methodology that is consistent with feminist, postmodern, postcolonial or other critical perspectives of social power." (2009, 46) She argues that fictions are particularly relevant in a context of social justice or social change. Fictional narratives can be used to challenge or criticize norms related to gender, race, age, class, and sexuality.

YOUTH PARTICIPATORY ACTION RESEARCH

My research project is specifically built on youth participatory action research. Participatory and creative practices can be introduced in the classroom in order to address issues related to gender inequalities but also sexual harassment, assault and violence. Adolescence is a transitional period during which teenagers distance themselves from their parents. Consequently, activities involving their peers become more important than family-based activities. There are many different participatory activities that can be used in classrooms: storyboarding, photovoice, performances, creative writing, video documentary, drawing, painting, dancing, singing, etc. All these practices allow teenagers to be at the center of their own cultural creation. Participatory practices encourage students to create their own messages addressing issues related to their own experiences. Bringing creativity into classrooms gives students a space to develop discourses that correspond with their experiences and meaning. These practices are particularly relevant when addressing issues related to sexual harassment, assault or violence. Through creativity, teenagers are able to place themselves at the center of the discourse and thus, they can explore their experiences and all too often, their traumas (MacDonald et al., 2011).

Yet, classrooms are not always safe spaces where students are free to share their stories. Even if participatory and creative practices are engaging tools that allow students to express their own voices, it is important to understand the educational context in which such methods are used. Sexual harassment and violence are part of educational institutions and are often perpetuated by teachers or staff members. Consequently, educators must know the policies and resources that are available on campuses to help students who are victims of sexual violence or harassment. Before implementing creative practices in classrooms, it is essential to understand the educational environment in which students are learning.

How do we use fictions to start a discussion about gender-related issues? How do we engage students with creative practices? I mentioned earlier the importance of knowing key concepts or definitions before engaging in critical thinking towards popular culture's representation. Similarly, students need to learn key concepts related to sexual violence. For example, they need to know what "gender-based violence" or "sexual violence" means, what is included in the definition of "rape", what is "consent". It is also important to share statistics and numbers related to sexual violence against young adults. Since this section is dedicated to the use of fictional narratives to address sexuality-related issues, students need to understand what "rape culture" is and how it is often perpetuated by popular culture's representations. Informed by this theoretical and conceptual framework, students can develop critical thinking towards cultural representations of sexual violence and understand how sexual violence is portrayed in popular culture. However, the aim is not only to help students develop critical thinking, but also to engage them with creative practices. As educators, we can invite students to challenge popular culture's representations of sexual violence by creating their own fictional narrative with any kind of medium. Also, students can explore their own experiences of sexual violence through a fiction. In this setting, the creative practice itself is simultaneously informed by a conceptual framework and a critical discussion about popular culture's representations of sexual violence.

EXPLORING GENDER-RELATED ISSUES THROUGH CREATIVE WRITING: THE EXAMPLE OF "BLURRED ZONES"

As part of a previous research project, I wrote a fiction built on a movie analysis. The research was focused on the representation of women in science-fiction Hollywoodian blockbusters. I studied how four female characters were simultaneously perpetuating and challenging norms related to gender, with a specific focus on body types and bodies in action. Building on the analysis of the four characters, I wrote a short fiction. The goal of this fiction was to explore academic concepts (such as norms, stereotypes and power) and to challenge norms related to gender and sexuality. I created a story that challenged conventional narratives (related to gender, race, class and sexuality) and that encourages readers to question their own world's inequalities. The story was written in French and is titled *Zones Troubles* ("Blurred Zones"). In a dystopic world, Alice, the main character, tries to understand why some inequalities related to gender, age, race, class and sexuality are still existing. She tries to understand why laws are so controlling and why governments are not doing anything to help people. The inequalities Alice faces are an amplification of some social injustices we now are facing in Western societies.

 As I was writing the fiction, I developed several elements that are challenging norms and stereotypes I identified in the movie analysis. First, Alice's appearance is not described with many details. The readers only know that her hair is dark and curly, and that she has brown eyes. It was important to me to create a character with a fluid appearance, so most female readers could easily identify with her. The goal was also not to reproduce the conventional white, young, thin and pretty female character, which is dominant in mainstream fiction. Moreover, Alice's sexuality is not defined. She is attracted by both men and women, but she does not identify herself as bisexual, which means she is not embedded in any categorization. Second, the movie analysis revealed that most lead female characters are the only women portrayed. I wanted to question this convention and, consequently, I created multiple female characters. Third, Alice is a fighter: she resists and tries to change her world. She is fighting against politics, governments and instances of power. She is trying to challenge different relations of power that are existing in her world. Alice's voice is often my own voice. Through the fiction, I express a need to resist conventional narratives and norms related to gender, age, race, sexuality and class. Moreover, Alice is going through several traumatic experiences: street harassment, sexual harassment at work, and sexual violence. Through Alice, I can publicly condemn some experiences I have been through in my own life. For me, writing a fiction was an act of resistance, as well as an act of denunciation against what women face during their life. In this sense, writing fiction can also guide students through the process of finding their own voice. It might encourage them to share personal stories, disguised in a fictional narrative, thus creating both an intimate and anonymous space where they can explore their past experiences.

CONCLUSION

However, sharing personal stories in classrooms imply ethical questions. What happens if students are telling actual and real stories? As educators, what is our role? Working with young adults erases several legal barriers since the students are over the age of majority. But, engaging in discussions about gender roles, norms, consent, sexual assault, harassment and sexual violence might trigger students. As Patricia Leavy argues, fiction is a tool of resistance that allows us to speak back, or to explore past traumatic experiences. As mentioned earlier in this presentation, classrooms are not always safe spaces where students are free to speak. As educators, we need to understand the educational context and culture in which we are teaching. Our role is also to collaborate with experts and professionals trained to facilitate dialogues with teenagers. Educators and teachers should collaborate with social workers and school counsellors, in order to gather resources on and off campus to make sure that students are taking care of properly. ■

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Jake Arsenault

Jake Arsenault is a University of New Brunswick entrepreneur-in-residence and the CEO of The Black Arcs, a scenario planning solution for urban environments. Expanding on a project completed for his University of New Brunswick PhD, Jake's first venture, (Inversa Systems) used gamma-ray imaging technology to assess infrastructure. Jake also holds a BSc. in Mechanical Engineering from the University of New Brunswick and is a graduate from the Wallace McCain Institute's Entrepreneurial Leaders Program. His interests range from psychology, photography and marketing to technology, teaching and design.

INTERVIEW CONDUCTED BY MARY STEWART

Citizen Designed Cit

MS: WHEN DID YOU GET INTERESTED IN CREATIVITY?

JA: I think I was born interested in creativity. I was that hyper-active kid in class who was always highly driven to explore ideas and construct objects. Curiosity is at the heart of creativity, and I've always been interested in just about everything--except following the rules. I've always sought many answers to significant questions, not just "the" answer.

My academic interests really flourished in my PhD program. My main advisor, Dr Esam Hussein, showed me how to channel and organize my wide-ranging ideas into very structured and disciplined thinking combined with clear arguments.

MS: CAN YOU DESCRIBE YOUR FIRST STEP IN THIS PROCESS?

JA: I find that bubble diagrams, such as the example shown here, are especially helpful in shifting from wide-ranging thoughts and impulses to a practical plan or meaningful narrative. When we tackle complex problems, especially with clients and collaborators, we must communicate quickly and clearly. Mapping things out helps to put content into a meaningful sequence. Busy people don't have the time or patience for rambling!

MS: WHAT DOES THE BLACK ARCS DO, AND WHY IS IT IMPORTANT?

JA: Lori Clair and I co-created The Black Arcs, a company that is developing an online tool for exploring the inter-relatedness of land use issues. Designed for consultants, city planners and anyone interested in the core issues impacting their town, the simulator is modelled on a video game to make it as engaging and accessible as possible. We are blending art, design, math and the humanities to develop a technology that can make vast complexity both intuitive and accessible.

With the simulator, users can change the layout of a city--and then, see the result. Moving buildings (such as schools) changes who will drive, walk or take the bus. This change then affects other systems and resources, such as public transportation, housing, the placement of parks, and so forth. Our simulator gives city planners and the general public an estimate of the total financial, health and environmental impacts of the change.

MS: THIS IS SUCH A NOVEL APPROACH TO PROBLEM ANALYSIS! HOW DO AUDIENCES RESPOND?

JA: Anything that offers multiple options can be hard to pitch to traditional decision-makers. They tend to seek the one right answer, supported by extensive metrics. By contrast, broader audiences tend to be fascinated by our simulation. We set up a large touch screen at the Sackville Farmer's Market and had people lining up to test it out. When we returned to the market the next week, the number of people who wanted to "play" had doubled. We don't need "the best" model--we need a model that is accessible and informative. The quote "all models are wrong; some are useful" really applies here. An effective model provides useful information about a problem. By contrast, the *solution* requires judgement.

MS: AND YET, THE STIMULATOR IS BEAUTIFUL AND ENGAGING, AS WELL AS INFORMATIVE.

JA: Yes! We are strongly committed to great design--and that requires attention to detail combined with a commitment to effective communication. This is demonstrated in the following two examples. In the first, buildings are shown as three-dimensional objects. This is more "realistic" and seems more sophisticated than the two-dimensional rendering shown in the second example. But the second example is actually the better choice for our model. Users can see the "people" more clearly and the overall file size is much smaller, making the model run better on many systems. A model becomes most effective when it focuses on the essentials and is extremely accessible to any user.

**MS: TELL ME MORE ABOUT YOUR CURRENT WORK WITH PLANNERS IN MONCTON.**

JA: We are developing a simulator to assist city planners in determining possible actions in revitalizing the downtown. As with the Sackville project, we will provide public access to the project at farmer's markets and other public venues.

It is important for us to be able to talk directly with users, both about their concerns and about their responses to the choices they make when using the program. What did it reveal to them? We want the public as well as the city planners to understand the ramifications of each decision. Everything is connected, often in unexpected ways. When citizens realize this, they can better understand and support the complex decisions the planners must make.

MS: YOU HAVE A SMALL CORE TEAM OF FOUR AND THEN ADD STAFF AS NEEDED WHEN WORKING ON BIGGER PROJECTS. WHAT IS YOUR PRIMARY RESPONSIBILITY?

JA: Communicating! Our clients are accustomed to linear decision-making and clear answers--but complex problems resist simple solutions. It is better to accept this and commit to a more extended decision-making process than to jump to a quick solution because it is easy to understand. We accept multiple small failures as part of the design process so that we can avoid failing big through superficial decision-making. And, of course, the simulation gives everyone a safe space in which to explore such failures without leveling actual building or pouring cement. I do a lot of listening and note-taking.

Sackville NB
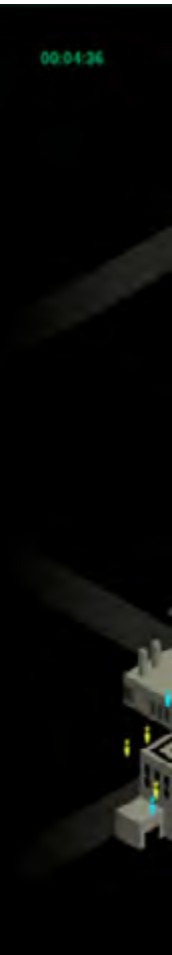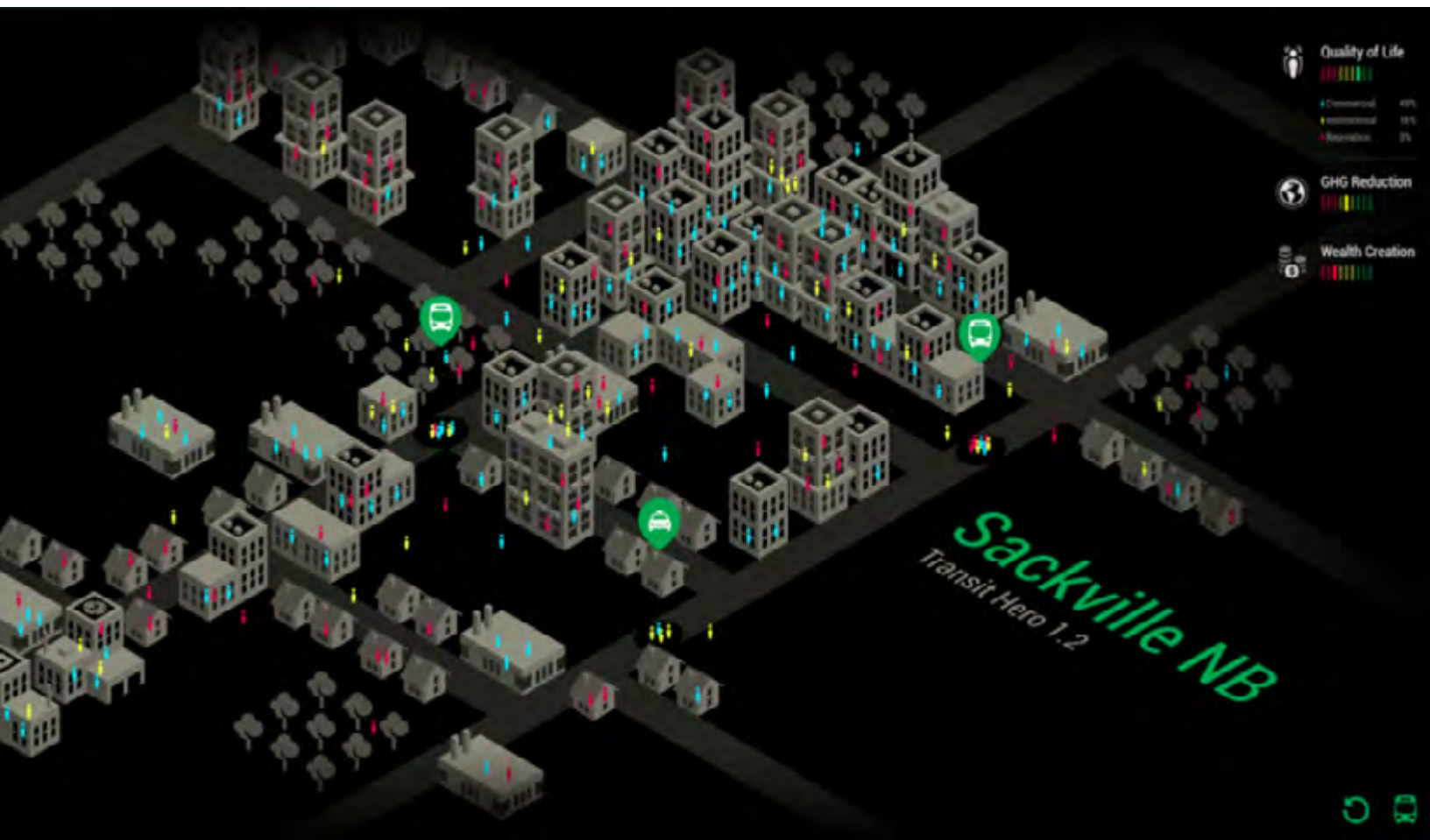
Transit Hero 1.2

Sackville NB
Transit Hero v4

School
23 people are here

MS: I'VE FOUND THAT STEM MAJORS ARE ESPECIALLY HUNGRY FOR CREATIVITY COURSEWORK. IT SEEMS TO OPEN UP NEW WAYS OF THINKING AND SERVES AS A COUNTERBALANCE TO THE MORE LINEAR APPROACHES THEY ENCOUNTER IN MOST OF THEIR COURSES. HAVE YOU HAD A SIMILAR EXPERIENCE?

JA: Yes--in two ways. First, academic programs tend to focus on building deep knowledge within a discipline. This is important--but taken to an extreme, it can narrow our focus until we know everything--about nothing, so to speak! Real-world solutions to complex problems don't live in silos. They require a blend of strengths from multiple disciplines. Second, creativity coursework invites a hands-on, collaborative and inquiry-based approach. Students can "play" their way to understanding. They are invited to generate new knowledge, rather than simply master existing information that they read in a textbook.

MS: YOU HAVE OFTEN MENTORED UNIVERSITY OF NEW BRUNSWICK STUDENTS DURING A SPECIAL SUMMER PROGRAM. WHAT ADVICE DO YOU OFFER?

JA: I customize my approach for each one. Their start-ups are often quite different, and their needs are distinctive. I often act as a sounding board and encourage them when the obstacles seem overwhelming. Getting a business launched requires guts as well as ideas and funding--and perseverance is crucial.

MS: WHAT WOULD YOU MOST LIKE TO SEE THE ATLANTIC CENTRE FOR CREATIVITY ACCOMPLISH?

JA: I think creative thinking needs to be widespread and more interdisciplinary. Having a designer on a tech team or a historian involved with city planning can increase our understanding of context and add distinctive skill sets.

Too often, we associate creativity with the visual and performing arts--but really, creativity can stimulate better problem-solving in any discipline. If you just bring in a designer at the end of the project, to make it look nice, you squander a valuable resource. You want that mindset up front, to help define the problem, propose options and set goals. Interdisciplinary work really takes off when we fully engage everyone's distinctive strengths! ∎

Innovations in Audio & Video Use in Online Learning

A COMMUNITY OF INQUIRY REVIEW

JILL CUMMINGS AND PAUL J. GRAHAM

As Associate Dean for Faculty Development at Yorkville University, Dr. Cummings develops and facilitates faculty professional development courses for professors who teach online and/or on campus. She is the co-author of Creative Dimensions of Teaching and Learning in the 21st Century. As University Librarian, Paul J. Graham helps develop online support strategies for students with research questions and assignments in an asynchronous learning environment.

As educators and researchers working at a major online university in Canada, we know that the Community of Inquiry (COI) framework (Garrison, D. R., Anderson, T., & Archer, W, 2000) has been highly influential in shaping online teaching and learning today. It has potential for enhancing online design and delivery. Boston et al (2019, p. 2) note: "Since its inception, the COI framework has been the most frequently cited model for explaining the online learning experience… In 2007, the framework was operationalized as a survey instrument and validated through multi-institutional data collection and analysis."

Therefore, we set out in June 2019 to review the scholarly literature based on the COI framework from the past ten years. We wanted to examine best practices for online teaching/learning and consider how they might be effectively implemented to improve online teaching and learning in our context. A prior comprehensive review of the scholarly literature related to the COI framework and online education has been provided by Befus (2016) for the period of 2000 – 2014; however, the increase in online education since then has been exponential, and practices and approaches are constantly being researched and updated.

In this paper we explain our review of the first 99 articles (June – October, 2019) and highlight innovations in the use of audio and video resources and feedback that have potential for improving online design and delivery. We begin by explaining the COI framework and outline our literature review process; then discuss four key articles about audio and video in relation to teaching and learning in our university context.

Community of Inquiry
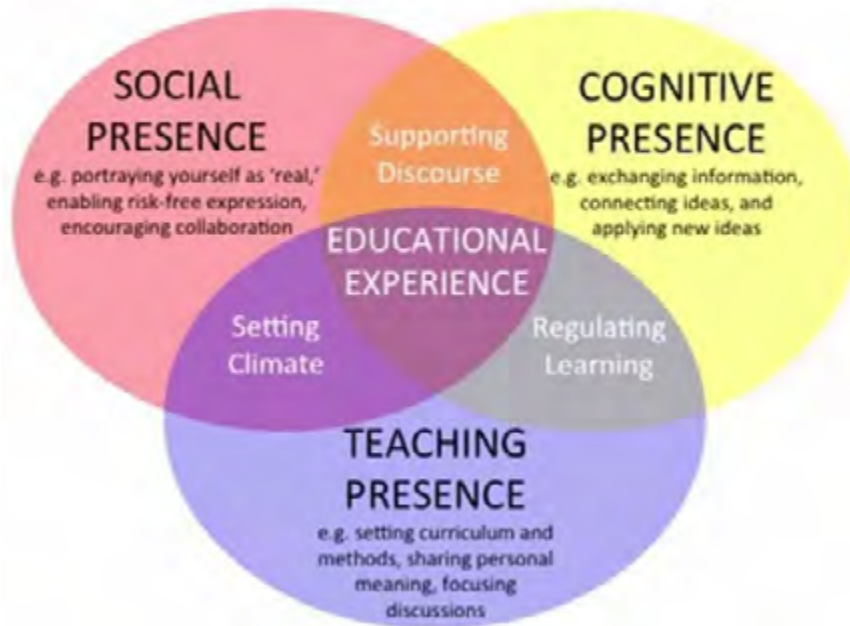
COMMUNITY OF INQUIRY (COI) FRAMEWORK

Garrison, Archer, & Anderson (2000) explained how we as educators are able to effectively develop learning communities or communities of inquiry (COI) using effective strategies to improve learner engagement and overcome the transactional distance and feelings of disconnection that students may sometimes experience in online studies. The COI framework is based on the Deweyan concept of communities of inquiry as learning communities that purposefully connect learners and teachers in collaborative and critical co-construction of knowledge (rather than memorizing solutions) through experiential learning (Garrison, Archer, & Anderson, 2000).

The COI framework (Garrison, Archer, & Anderson, 2000) recommends how three presences may be strategically implemented through activities and resources in online and blended learning – social presence, teaching presence, and cognitive presence. Social presence (SP) relates to developing a learning community in which participants develop purposeful interpersonal relationships by being able to project their individual personalities in online learning activities (Boston et al, 2019). Social presence may be enhanced in online learning by using such strategies as supportive and encouraging communications and including spaces and resources for connections amongst participants such as "meet and greet" forums, photos, images, and audio/video introductions. Teaching presence (TP) involves purposeful instructor course design and facilitation so that participants maximally connect with their instructors and course to achieve worthwhile outcomes (Anderson, Rourke, Garrison, & Archer, 2001). Effective teacher presence may be achieved through consistent and frequent instructor interaction with participants, timely and relevant feedback, as well as inclusion of instructor audio and/or video clips and responses. Cognitive presence (CP) refers to the extent to which learners co-construct knowledge and meaning through the activities and discourse (Garrison, Anderson, & Archer, 2001). Developing effective CP involves selection of relevant and engaging content and activities which facilitate a course in which critical and collaborative construction of knowledge is valued and possible.

Garrison, D.R., Anderson, T., & Archer, W. (2000). Critical Inquiry in a Text-Based Environment. Computer Conferencing in Higher Education. *The Internet and Higher Education, 2.*

LITERATURE REVIEW OF COI

METHODOLOGY: DATA COLLECTION AND ANALYSIS

Our preliminary search of the COI literature began in February 2019 (ending in June) using databases from EBSCO and ProQuest. Additional follow up searches were conducted, including a comprehensive search of Scopus Index. These searches used the following terms: "community of inquiry" OR "communities of inquiry" and any term that relates to online learning, such as "Distance Education" OR "online education" OR "Online Teaching" OR "Online Learning" OR "Learning Online" OR "Virtual Classrooms" OR "Virtual school" OR Telecourses. The search results were then narrowed by specific filters, such as peer-reviewed articles, English language, and 2010 to present. Our inclusion criteria focus on journal articles that concern some aspect of the Community of Inquiry framework that apply to the post-secondary education environment.

The results of each search were uploaded to Zotero bibliographic software for organization and review. The overall results for analysis, 1057 articles, were quickly scanned for relevancy, and then flagged for review. Of these, the authors have reviewed 99 for this brief paper and a potential 285 remaining articles for further analysis. It is expected that the final version will include additional recent articles from the Athabasca Communities of Inquiry website: https://coi.athabascau.ca.

The articles for review were uploaded to NVivo 10 qualitative software for analysis. NVivo provides many ways to classify and analyze research literature, such as year and journal title frequency. Each article was reviewed in hardcopy, then submitted for integration in NVivo. In addition to basic bibliometric information, these specific elements were identified:

TABLE 1: ITEMS CLASSIFIED IN EACH JOURNAL ARTICLE

ITEMS TO CLASSIFY	DEFINITION
Empirical or Conceptual	Is the article new, original research? Or a review?
Online, Blended, Both	What context does it cover? Purely online, for example? Or both?
Teaching/Learning or Design/Curriculum	Is the focus of the article on the teaching aspects or the design aspects?
Social, Teaching, Cognitive Presence	Are there specific elements of the COI model being addressed? Measured? Which ones? All three?
Technology	What technology is being used to create and manage COIs?
Theory	Are there relevant theories being used in conjunction with the COI model?
Practice Standards	Are there any practice standards or best practices being championed?
Benefits and Barriers	What are any relevant benefits or barriers to creating and using the strategies, technologies, and/or the COI model?

FINDINGS

The findings for this brief paper are based on the preliminary analysis reviewing 99 articles with a potential 285 remaining. These were presented in our session at the Creative Connections Conference (Cummings & Graham, October 2019). They should be considered only a basic picture of the content at present. Given the focus of the Creative Connections Conference on innovation and creativity, we discussed newer innovations that work in relation to audio and video use in online learning – not a comprehensive list of practice standards and conditions.

Table 2 shows the year of publication representing the 99 articles reviewed.

TABLE 2
YEAR OF PUBLICATION

YEAR	RESULTS
2019	1
2018	7
2017	13
2016	12
2015	11
2014	14
2013	7
2012	12
2011	13
2010	9

Table 3 contains the top journals with the most publications; then the remaining articles are spread out across many journals. The top journal is E-Learning and Digital Media and the Journal of Asynchronous Learning Networks. This trend is not expected to change radically.

FREQUENCY OF JOURNAL ARTICLES CONTAINING COI

TITLE OF JOURNAL	NUMBER OF ARTICLES
E-Learning and Digital Media	13
Journal of Asynchronous Learning Networks	6
Internet and Higher Education	4
Online Learning	4
Journal of Educational Computing Research	4
International Review of Research in Open & Distance Learning	3
SAGE Open	3
Journal of Dental Education	2
Educational Media International	2
Journal of Developmental Education	2

Table 4 shows the focus of content addressing research, context, and pedagogy within an article. The majority of research reviewed so far is empirical with the focus of most of the research for online only environments. Of special note, although it was expected that articles would naturally focus on either teaching or learning contexts or design or curriculum contexts, the articles showed that these are usually discussed together rather than assessed separately.

RESEARCH, CONTEXT, AND PEDAGOGICAL FREQUENCIES

TYPE	VALUES	RESULTS
Research	Empirical	69
	Conceptual	30
Context	Online	73
	Blended	12
	Both	14
Pedagogical	Teaching/Learning	3
	Design/Curriculum	Nil
	Both	96

The primary data collected for the conference presentation specifically addressed the Communities of Inquiry model itself as identified in Table 5. It was not assumed that the COI elements - Cognitive, Social, and Teaching Presence - would all be addressed at the same level of focus, so the reviewer assessed where one was being addressed more than the others. As expected, the majority of articles address the entire COI model as a whole, but some articles did focus on particular elements of the COI model. These results do not add up to 99 articles because of the discussion of one or more of the COI elements within each article. Of these results, Social Presence was addressed the most as a specific concept to review; however, in most articles all three presences were addressed.

TABLE 5

COMMUNITIES OF INQUIRY MODEL AND FREQUENCY OF "PRESENCE"

DATA CATEGORY	VALUES	RESULTS
COI	Cognitive Presence	5
	Social Presence	6
	Teaching Presence	5
	All Three Addressed	87

This brief paper cannot fully relate all of the interesting data collected thus far. The next section focuses on one aspect considered an important theme within the COI literature and relevant to our university context recently - that's the importance of audio and video feedback, resources, and technology in the online context.

INNOVATIONS RELATED TO AUDIO AND VIDEO USE

Four key articles from the current literature review related to innovations using audio and/or video feedback and resources in online learning - deNoyelles et al (2014); Ice et al (2010); Lindorff & McKeown (2013); and Olesova et al (2011) - are discussed here in relation to design and delivery practices at our online university. We selected these because we see these as recent innovations in our online teaching/learning context that support SP, TP, and CP - we provide similar activities and resources in the online components of our courses. These articles demonstrate how teaching, social, and cognitive presence may be strategically enhanced through the use of audio and video resources and feedback.

DeNoyelles et al (2014) provide a position paper that explains how asynchronous discussions, which are standard activities in online learning in higher education, require expert attention to design and delivery to build an effective learning community and strategically implement all three presences - CP, TP, and SP. They reviewed the literature to find effective techniques for supporting asynchronous online discussions and found that these three presences are enhanced by prompt instructor feedback, peer facilitation, effective discussion prompts, and audio feedback. In our online university programs, prompt feedback, peer facilitation and interaction, and effective discussion prompts are all carefully considered in designing and teaching courses. Instructors are required to provide meaningful feedback on discussion posts and responses and evaluate and provide suggestions for improvement each week. Peer interaction is promoted by requiring an initial response to each Discussion Question (DQ) by Wednesday each week and at least three meaningful responses to peers during the remainder of each week. DQs are carefully developed to align with the course outcomes for each week/unit to encourage critical and collaborative discussion regarding the content. Our professors are beginning to consider how to implement audio and video into our discussion forums and courses, so this innovation was of particular interest to us.

DeNoyelles et al (2014) recommend using audio feedback to develop the three presences in online discussions by using software like VoiceThread or Audacity freeware to attach a short feedback audio file to the discussion board. They explain that audio feedback seems to communicate the instructor's real meaning and feedback on the discussion more effectively than text-based feedback because it helps students hear the instructor's tone. As well, audio feedback gives the students a feeling of being more connected and thereby enhances TP, CP, and SP. They noted that audio feedback took less time for instructors to provide than text-based feedback. Short video feedback was also considered to be effective in enhancing TP, CP, and SP; however, video involved more time and sometimes technical difficulties. Overall, they noted: "… we would recommend the use of both audio and video to provide feedback to students either individually or at the end of the discussion to synthesize main ideas or provide general feedback to the class as a whole." (DeNoyelles et al, 2014, p. 161). In line with this, at our online university, we currently encourage and teach professors how to develop and add short audio and video recordings via Zoom, our video conferencing platform, to introduce discussion topics each week or summarize them at the end. As yet, however, we have not added audio or video feedback regarding discussions - written feedback and evaluation of discussions continues. This may warrant further research and trials in the future.

Also related to modes of feedback, Ice et al (2010) provided empirical evidence that indicated that in a study of 196 graduate students in online education courses that students preferred a combination of audio and written feedback on their academic writing. Audio feedback appeared to improve TP and connections to students. Ice et al (2010) concluded that the combination of audio and written feedback is the most effective based on students' responses; however, noted that students were most likely to prefer written feedback regarding details like references/citations and

spelling and grammar. Our online university instructors currently provide comprehensive written feedback on students' written assignments using "track change" and comments in the edit mode of Word and provide a summary of feedback with three or four suggestions for improvement. These are returned to students with the detailed grading rubrics and criteria regarding each assignment to provide feedback on both content and critical thinking and writing, including APA and formatting, references and citations, and spelling and grammar. We haven't considered trying audio feedback, but have the means to research and pilot this further as we do use TurnItIn for the evaluation of some assignments. TurnItIn allows text-based and audio and video feedback. This would certainly add additional time – already at a premium – for instructors. They are diligent in providing comprehensive written feedback to students. We will be looking for further research regarding audio feedback and note ways forward.

We were drawn to a similar study by Olesova et al (2011) in our review because it also addressed this question of audio feedback, particularly in relation to the satisfaction expressed by ESL and EFL students about feedback received on their written assignments. Our university is currently engaging an increasing number of ESL students in our programs.

Olesova et al (2011, p. 30) investigated the use of audio feedback as a means to enhancing connections with students. They noted: "The majority of studies exploring audio feedback in online courses indicate that it increases the retention of content and promotes "students' high satisfaction with asynchronous audio feedback as compared to asynchronous text only feedback" (Olesova et al, 2011, p. 31). Twenty-five ESL students from a variety of language and cultural backgrounds participating in a community college reading class in the United States and 39 students studying EFL in Russia responded to a survey regarding the use

of text-based and audio plus text-based feedback. It compared students' response to receiving individual text-based feedback from their instructor during the first two weeks; then audio feedback on the discussions via Vocaroo plus text-based comments and edits using "track change" in Word during the final two weeks of the course. The researchers noted that students were generally positive about the audio feedback, and that "…using audio feedback had an impact on the sense of presence." (Olesova et al, 2011, p. 39). Students commented that audio feedback "…made me feel like I was in a class." (Olesova et al, 2011, p. 40). Both groups noted that hearing the instructor's voice helped them understand the course. However, both the ESL and EFL students preferred audio feedback combined with the written feedback because of the visual support that it provided. The researchers recommend combined use of audio and written feedback to students. In our online courses use of audio plus written feedback could be considered in the future as a means to engage students with an ESL background. The question of how instructors will manage this effectively and efficiently, and what types of feedback are more important to deliver via audio feedback needs further consideration.

Another empirical study by Lindorff & McKeown (2013) recommended the strategic implementation of audio and video recorded presentations to enhance student engagement and connections to their professors in management undergraduate courses that were delivered via blended learning. Three hundred and sixty two surveys (75%) about students' preferences for types of online and face-to-face activities were returned and analyzed according to the COI framework. Results appeared to be contradictory. While 47 per cent of the students asked for more materials to be offered online, 61 per cent indicated a preference for face-to-face tutorials. Only 47 per cent accessed the text-based lecture notes online; but 71 per cent requested video recordings of lectures. Students wanted more connections to their professors and believed they would benefit from the addition of audio and visual presentations in their online activities. However, we do not get a clear picture of the nature of the lectures that were provided; nor recommendations about the length and content for video recorded presentations that were requested by the students. This is relevant to our university programs which offer undergraduate business programs through hybrid delivery – both a face-to-face class each week plus online resources and assignments. In some of our courses, lectures are provided in print format or via Powerpoint; in others there are video lectures with lecture notes. Further research is needed to inform our delivery of these types of blended courses to determine which types of resources are effective and preferred by students online.

CONCLUSION

These are insights gleaned from our initial review of studies of the COI model related to implementing audio and video in online learning. We expect many other themes to arise as we complete this systematic review of the COI literature. There seems to be potential for improving courses and student engagement through the strategic implementation of audio and video presentations and audio or video feedback in online course design and delivery. Students favour such strategies that increase connections with their instructors and make the courses "more human". However, a range of questions about how to effectively develop and implement these innovations to enhance and build engaged communities of learners arise.

Our context shows opportunities for further research and piloting related to these innovations. We have begun to implement the COI framework. Further work needs to be done to investigate what and how to best serve learners and teachers through the strategic implementation of audio and video resources and feedback; as well as how to implement other best practices to improve social, teaching, and cognitive presence in online teaching and learning to enhance our communities of inquiry. The COI framework provides a valuable model for reviewing and approaching these issues. ∎

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The Order — Chaos Dynamic of Creativity

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CREATIVE CONNECTIONS CONFERENCE, 2017

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Over the past 70 years, creativity researchers have learned a great deal about creative people, the creative process, and the creative environment. However, contradictions within creativity research literature abound. Our current understanding of creativity consists of isolated pieces of information. An effective, overarching theory remains elusive. Complexity theory may hold the key to a more comprehensive, integrated understanding of creativity. This presentation will focus on one characteristic of complexity theory - the order/chaos dynamic - and how it relates to creativity. Existing creativity research results will be viewed from this new perspective, illustrating how this framework can help make sense of disparate and sometimes contradictory results.

Divergence, extroversion, agreeableness, openness, conscientiousness, neuroticism, diversity, connectedness, and more, exist on a continuum. Along each of these continuums, opposing forces are constantly pulling us toward one extreme or the other. For each, is there an ideal balance for maximum creativity? Can this perspective fuel advances in the creativity of artificial intelligence? What are the implications for the development of everyday creative practice? This presentation will suggest some preliminary answers to these questions – answers that should prove thought-provoking and maybe even creativity-enhancing.

This presentation is based on one aspect of the research I'm doing to try to better understand creativity and innovation by looking at it through the lens of complexity science. This research will form part of my dissertation, which has a current working title of: *A Complexity Science Based Framework for Understanding Creativity and Innovation.*

Creativity is a complex, poorly understood topic. Theories of creativity have evolved over the years, from simple personality-based theories to social, then componential (that is, multifaceted), to a systems theory of creativity – which, in very simple terms, means multifaceted and the various facets interact and affect each other.

I think the next step in this evolution of theories of creativity is a complexity science-based theory of creativity. Yes, in order to better understand the complex, poorly understood topic of creativity, I want to use the more complex, less well understood topic of complexity science. It may sound crazy, but I think that by putting the two together, we will gain a better understanding of both.

Let's start with some definitions:

Creativity: development of something that is novel/ new/ original and of value/ appropriate/ adaptive

Complex Systems: Mitchell (2009) defines a complex system as "a system in which large networks of components with **no central control** and simple rules of operation give rise to **complex collective behaviour**, sophisticated information processing, and **adaptation** via learning or evolution" (p. 13).

Complex systems consist of interconnected or interdependent parts and are often hard to understand because the causes and effects are not obviously related. Pushing on a complex system in one location often has effects at a location far removed from the first location. This can happen because the parts are interdependent and interconnected - related, but not necessarily directly related.

While about 15 criteria have been identified that are persistent across different theories of complex systems, I've identified four primary ones that I deal with in my research. In this presentation I will focus on one, the order – chaos dynamic that is a characteristic of complex adaptive systems.

Imagine these dots morphing from neatly ordered on one side to random on the other and you'll have a visual representation of an order - chaos continuum. If you further imagine no movement on the left and lots of movement on the right, and the amount of movement in the middle part increasing from left to right, you'll have an even better conceptual picture of an order - chaos continuum. The dynamic part comes in when we talk about individuals, which are called agents in complexity science terms. Individual agents in a complex adaptive system tend to move on this continuum as they adapt to other agents and the environment.

Early in my studies of creativity I noticed there was a lot of research that suggested highly creative people scored high on various scales but going higher on that particular scale resulted in a drop in creativity or a lack of any correlation. Examples include: intelligence, extraversion and psychoticism. I began thinking that all of this should be brought together as a Goldilocks theory – to be highly creative, all these factors need to be just right.

Then I started researching the literature on complexity, beginning with Ralph Stacey's book *Creativity and Complexity in Organizations* (Stacey, 1996). Stacey has identified five parameters in organizations that affect creativity:

The rate of information flow, the degree of diversity, the richness of connectivity, the level of contained anxiety, and the degree of power differentials. For each of these parameters, you can have too much, or too little, or just the right amount to maximize creativity.

As I researched complexity theory further, it became clear to me that in a least some cases, these are not dimensions where there is an optimum point – reaching the optimum is actually a result of a composite of two more extreme positions, the result being a continuous movement along the continuum. Rather than there being an equilibrium, the optimum position is constantly changing.

Other features that line up along this order - chaos dynamic include: the big 5 personality factors: extraversion, agreeableness, openness, conscientiousness, and neuroticism. Much of the creativity literature consists of apparent contradictions. However, when seen in the light of an order – chaos dynamic, it is understood that contradictory research results should be expected. In fact, it appears that more dynamic movement along all of these continuums may be the mark of highly creative people, or companies.

As an interesting side note: in the extraversion – introversion continuum, extroversion is the ordered end of the continuum and introversion is the chaotic end of the continuum. This may not be immediately intuitively obvious. To understand this view, it should be noted that the introvert's brain treats interactions with people at the same intensity level that it treats encounters with inanimate objects. Introverts process everything in their surroundings and pay attention to all the sensory details in the environment, not just people, like extroverts tend to do.

My experience with a company I was the co-founder of helps me understand that good companies also achieve an optimum, dynamically changing, balance along many different continuums, not through single-mindedness, but by allowing opposing forces to find the right balance. For example, policies and procedures applied too rigidly makes a company too brittle, but lack of policies and procedures can cause a company to be inconsistent and inefficient. The best companies have policies and procedures, but they are not slaves to them, they are prepared to 'break the rules' when appropriate. Highly creative people apply this same concept by keeping in mind what is considered 'normal' or accepted in the area they are working in and they think beyond the currently accepted style, while remaining loosely anchored to it.

To sum up my view on creativity as it relates to the order/chaos dynamic:

Every second of every day is unique. Each moment is new, we have never encountered it before. Dealing with and responding to each moment is an exercise in creativity. Not only were we born creative, we would not survive with a total lack of creativity. However, we all have lots of room to be more creative and a better understanding of the mechanisms involved, cognitive and otherwise, can help us achieve greater creativity. This does not mean living on the thin edge of chaos, as suggested by the small number of people who have written about creativity and complexity. Living creatively requires a Janusian dance within and across the broad complexity landscape that exists between death by rigidity and death by dissipation.

"Nietzsche saw the greatest feats of creativity as being born out of a rare cooperation between the Dionysian spirit of ecstatic intoxication, which imbues the work with vitality and passion, and the Apollonian spirit of sober restraint, which tempers chaos with order and form" (I Friedrich Nietzsche, The Birth of Tragedy and Other Writings, eds, Raymond Geuss and Ronald Speirs, Cambridge University Press, 1999).

An Applied, Contemporary Example:

Computer generated art: The idea of it makes some people cringe, but we can learn a lot about the human creative process by trying to develop creative programs. A new artificial intelligence approach to computer generated art has been developed called the *creative adversarial network*. This is an excellent example of the order – chaos dynamic at work. This recent advance in AI lends support to the concept of an order – chaos dynamic of creativity. About a year ago, there was a paper published about a new approach for computer generated art (Elgammal, Liu, Elhoseiny, & Mazzone, 2017). The results passed a Turing Test of sorts. That is, they tested the output against human generated art (WikiArt and Basel) and had various people evaluate the results. The evaluators rated the images created by computer more highly than the human generated art. The evaluators identified with it more closely and found it more inspiring.

The system starts with what they call a generative adversarial network, where one AI system learns to recognize existing styles, and another generates images that get accepted or rejected by the first system, so that the generating system learns to mimic existing styles. This has been the state of the art (pun intended) in AI generated art for several years. The advance reported in the recent publication was the addition of another AI system that pulled the generating system away from mimicking – getting it to deviate enough to be novel, but not so much that is no longer recognised as an existing style by the first system. This new combination is the creative adversarial network.

A full understanding of creativity as an emergent property of complex adaptive systems could lead to many more advances such as the creative adversarial network. It could also help us understand how to teach, support, encourage, measure, recognize, promote, and understand creativity. In a world of increasing complexity, striving to understand and harness creativity should be at the top of our agenda. ■

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Creative Connections

FICTION, FUTURES STUDIES, AND LEADERSHIP (FOR THE FUTURE)

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INTRODUCTION

Leadership skills like creative and complex problem-solving, engaging communication, social innovation, and participatory facilitation are some of the most wanted competencies in any job market. Experts and managers in various sectors are desperately searching for emerging leaders with such skills and for graduates of leadership education and development programs that nurture those competencies. Yet, they seem to not be able to find those creative competent candidates in sufficient numbers. Our understanding of leadership is still predominantly focusing on a leader that is ahead of or even above the crowd that they inspire to follow. Any web-search for "leadership images" will substantiate that claim.

Leadership education and development programs often focus on quick fixes by developing skills and behavioral approaches that are profitable and that were successful in the past. Most programs of today don't realize that even tomorrow's problems may quickly become history in the context of exponential developments in many fields of practice.

Meaningful leadership paradigms need to go beyond reestablishing the alleged stability of the past by "paddling backwards" or "muddling through" the challenges of the present (Scharmer, 2016). Truly innovative long-term approaches to leadership from and for the future are urgently needed.

CONTEMPORARY FUTURES-ORIENTED LEADERSHIP APPROACHES

Heifetz (1994) seminal work on "adaptive leadership" at the Center for Public Leadership of the John F. Kennedy School of Government at Harvard University was one of the first contemporary leadership models recognizing that leaders increasingly face problems that are complex and dynamic. His approach focuses on multifaceted situational challenges of the present that leaders need to respond to with a "systems perspective". His message is being heard as demonstrated by a number of keynotes that he is engaged for and by the flocks of emerging leaders who enroll in his post-graduate leadership development programs. But in the light of significantly more complex and even faster changing environments, we need to join the Israeli historian and a professor in the Department of History at the Hebrew University of Jerusalem Yuval Noah Harari, who, in his bestseller Homo Deus: A Brief History of Tomorrow (2015), asks the question: "where do we go from here?"

A few publications in recent years have explicitly addressed leadership challenges of the future. For example, in 2015 the International Leadership Association had invited scholars and practitioners to imagine what leadership might look like in 2050. In the resulting issue of the Building Bridges Series, leadership scholar Jackson (2015) has suggested a multi-dimensional approach to leadership covering different spans of time and reaching into the future. Introducing their quantum leadership model, Piel and Johnson (2015) urge us to consider scientific paradigms resulting from chaos and complexity theories and to better integrate uncertainty and decoherence into leadership. In their model of Murmuration Leadership authors Suderman and Foster (2015) focus on humanizing the workplace and on "we-leadership". Using strategic foresight approaches they describe several scenarios in the context of people-oriented organizational development.

Further, with his "Theory U" Scharmer (2016) invites us to overcome the present abyss by opening our minds, hearts, and wills and by embarking on a journey connecting our current self with our future emerging self.

EMERGING POST-CONTEMPORARY APPROACHES TO LEADERSHIP

Harari (2015) urges us to "think in far more imaginative ways about our future" and let go of our conditioning by the past. He claims that we need to develop responses to challenges resulting from upgrading homo sapiens to "homo deus" through "biological engineering, cyborg engineering, and engineering of non-organic beings". Authors Goldin and Kutarna (2016) describe the opportunities of what they call "our new Renaissance" as major human development and "eruption of genius" as long as we succeed in overcoming extremism, protectionism, and xenophobia by mapping new connections, by reconnecting with values and by seeing the bigger picture.

Philosophers Avanessian and Malik's (2016) claim that we live in a "speculative time structure" where "future happens before the present". They proposed a concept of the "post-contemporary" in which they conceptualized transformative, speculative, poetic actions and pragmatics towards an "open future" instead of an "automated future". Finally, leadership scholars and practitioners Elkington, van der Steege, Glick-Smith, and Green (2017) have presented their view of "Visionary Leadership in a Turbulent World", which, they claim, helps us thrive "in the New VUCA [Volatility, Uncertainty, Complexity, Uncertainty] Context". In particular, their focus on "meaning-making" as a means of strengthening resilience of communities and organizations for the future reinforces my own work on "values-oriented leadership" (Mengel, 1999; Mengel, 2004; Mengel et al., 2009; Thomas & Mengel, 2014; Mengel, 2017; Mengel 2019a).

PROPOSAL OF A MODEL OF POST-CONTEMPORARY LEADERSHIP

Drawing from these emerging paradigms I propose a trans-disciplinary model of Post-Contemporary Leadership (PoCo). It can be imagined as a complex and highly adaptive system floating in the multi-dimensional time-space (dis-)continuum. This model can further be characterized by the following co-existing values, states, and modes:

- local – global – trans spatial
- intra – inter – trans personal – trans gender - transhuman
- past (future) – present (past) (future) – future (past)
- claim – enable – fail – sustain– disclaim
- disruptive – poetic – co creative – synthetic – integrative
- dynamic – fluid – elastic – plastic
- emergence – design – change
- structure – process – influence – relationship – system(s)
- resisting – following – participating – facilitating – leading

TRAPEZE PERFORMANCES
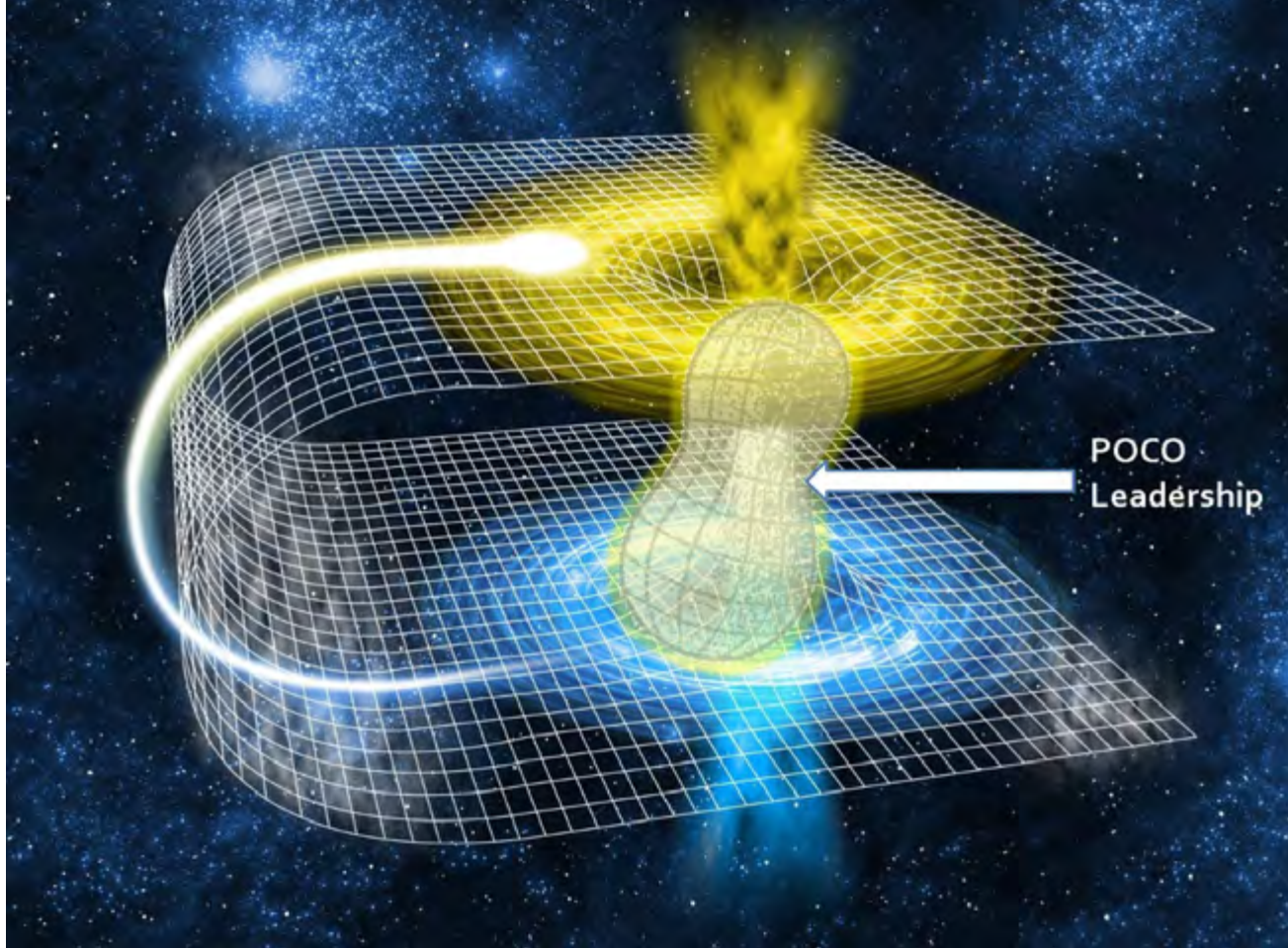
Leadership agents and artists of the future – and for the future –, encompassing both leaders and followers in the more traditional nomenclature, will dynamically and artistically move in this multidimensional space enacting various (or all) of these values, states, and modes at different (or all) times, oscillating between various degrees of agency. As demonstrated by Kirkpatrick (2015) with a poster in his blog, "Trapeze performances are a good metaphor for [that kind of] leadership":

Examples of PoCo Followership and Leadership attitudes, skills, and behaviours are as follows:

- Imagine the future, act globally, consider the local; identify and orient towards values shared by all stakeholders
- Empathize with and consider on all levels and from all perspectives; shared decision-making, problem-solving, leadership across human and non-human systems; focus on relationships and relational aspects
- Imagine and consider non-linear developments and coexistence of often paradox phenomena
- Leadership as risky choreographic artistry
- Open minds by disrupting the "traditional" while creating and integrating the unexpected
- Move, shake, and shape
- Dance the dance of followership
- Multi-level and multi-dimensional follower- and leadership
- Oscillating between various modes of participation

SCIENCE FICTION: LEADERSHIP ON MARS AND BEYOND

As an avid reader of various works of science fiction and also an emerging writer exploring this field, I became interested in how other writers would imagine the way leadership and followership might play out in their futures. I was curious whether their imagined futures might inform or corroborate models of futures-oriented leadership. Inspired by Tom Lombardo's (2018) work on studying science fiction in the context of futures studies, I embarked on analyzing how Sci Fi writer Kim Stanley Robinson (1992-2018) imagines leadership in the future to unfold in his Mars Trilogy (1992-1996). The findings from a computer-aided content analysis approach using the Leximancer software (Leximancer, 2018a, 2018b) indeed will support a model of egalitarian leadership, of leadership of the people, where teams, community, and relationships between every person play a major role.

While human settlements on Mars – and even human travels to Mars – might be "way out there", considering and moving towards a highly dynamic, participative and multi-dimensional leadership model for the future is not (Mengel, 2019a). Learners in my courses already successfully engage with futures and values-oriented models of leadership, and this is only the beginning (Mengel, 2019b). ∎


SCREENSHOT OF COMPUTER AIDED CONTENT ANALYSIS OF MARS TRILOGY (USING THE LEXIMANCER SOFTWARE; LEXIMANCER, 2018A, 2018B)

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Creative Pedagogy
PAUL SYME
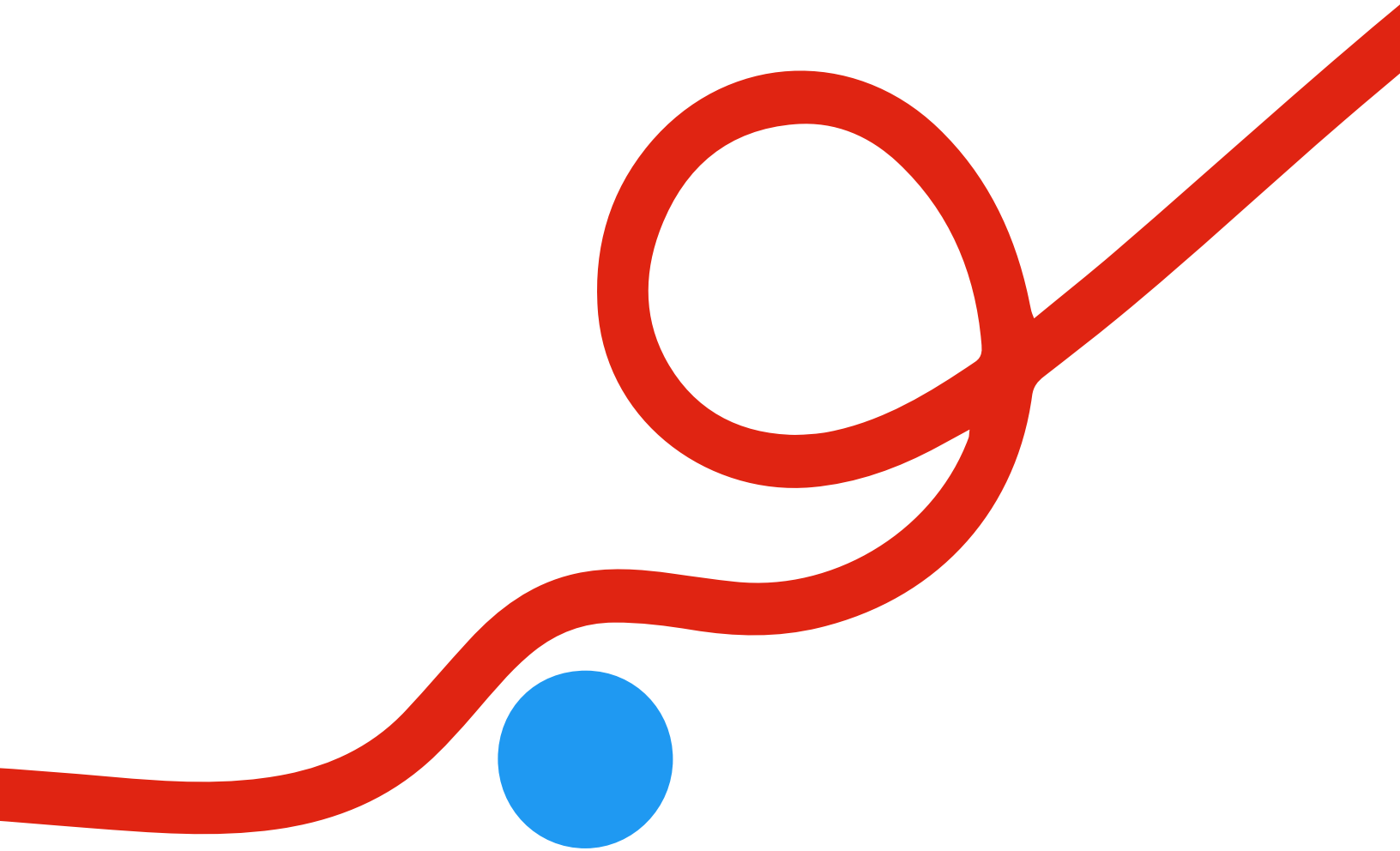
Our workplaces and classrooms are more than the sum of their parts. They are communities with numerous connections and permeations. The resources and people we work with all impact the quality of each others performance and productivity. Where some tasks are routine and predictable, others challenge us to be resourceful and creative. In environments and tasks that benefit from adaptive people and novel problem solving, leaders and teachers have a choice. Allow people to augment their job with creative approaches or embed resources and conditions that encourage creativity and collaborative problem solving. Augmentation is hit and miss where embedding cultivates desired results. The more we understand and thoughtfully embed such assets the more effective and efficient growth should occur. To embrace emergent concepts, people and technologies, we need to open a space for improvisational thinking. Towards fashioning an effective creative ecology, we benefit from examining the impact various content and structures have on participants and how we can employ them to maximize their functionality. Watch the video at *www.atlanticcentreforcreativity.com* to learn how we address it. ∎

THE ACC ONLINE

Visit the ACC online for extensive resources and further dialogue on the topics covered in Issue 01 of Creativity Matters. The website includes participant biographies, interviews with exemplars of creativity, articles, information on partner organizations and much, much more.

To watch Paul Syme's video CREATIVE PEDAGOGY, visit the resources section under ACC YouTube. In this lively and informative presentation, Professor Syme discusses current challenges in teaching and learning and proposes a series of creative approaches to pedagogy as solutions.

Also featured is a selection of conference presentations, recommended TED Talks and video interviews with Canadian artists.

ADVANCED STUDIO PRACTICE

Guest Lecture Series

The **NEW BRUNSWICK COLLEGE OF CRAFT & DESIGN**'s *Annual Guest Lecture Series is partnering with the* **ATLANTIC CENTRE FOR CREATIVITY** *to provide a virtual learning experience free to the public. Coordinated by the* **ADVANCED STUDIO PRACTICE** *Students, the purpose of the Guest Lecture Series is to model successful contemporary practice to* **NBCCD** *students and to inform, inspire and ignite art and design dialogue and engagement in the greater public community. They are professional talks delivered by invited guest speakers on art, design and related visual practices. These noon-hour sessions celebrate the creative, cultural and academic achievements of artists, designers and fine craft practitioners.*

THURSDAYS 12PM-1PM
SEPTEMBER 17 – DECEMBER 10
BIT.LY/GUEST-LECTURE-SERIES

THE ASP GUEST LECTURE SERIES FOCUSES ON NEW BRUNSWICK AND PROVIDES:

1. A platform for the presentation and advancement of professional artists, designers and fine craft practitioners.
2. A time for dialogue about ideas and opportunities in the fields of contemporary practice.
3. A celebration of creative and cultural riches that we hold in Atlantic Canada.

LINEUP

SEPTEMBER 17 *Dr. John Leroux*

SEPTEMBER 24 *Mary Stewart*

OCTOBER 1 *Tony Merzettti*

OCTOBER 8 *Dr. Casey Burkholder*

OCTOBER 15 *Dr. Danielle Hogan*

OCTOBER 22 *Gillian Dykeman*

OCTOBER 29 *Thaddeus Holownia*

NOVEMBER 5 *Jillian Acreman*

NOVEMBER 12 *Charles Gaffney*

NOVEMBER 19 *Elizabeth Demerson*

NOVEMBER 26 *Tracy Austin*

DECEMBER 3 *Peter Thomas*

DECEMBER 10 *Jackie Bourque*

DR. JOHN LEROUX | SEPTEMBER 17

Making it all matter: finding resonance and meaning in gallery exhibitions

We often have only one shot at connecting with the public when the visual arts are placed in front of them. When we get it right, it can transform lives and inspire deeply. If we don't, we let meaning and connection slip away. How do we take gallery opportunities here in New Brunswick – however small – and make them matter? Dr. John Leroux has practiced in the fields of architecture, visual art, history, curation, and education, and he is currently the manager of collections and exhibitions at the Beaverbrook Art Gallery.

MARY STEWART | SEPTEMBER 24

The Parts and the Puzzle

This presentation will explore three questions. First, how can our past experiences inform our current choices? Second, which current projects have the greatest potential? Third, how can our current actions set the stage for future growth? Professor Mary Stewart is an artist, author, editor and educator. Her artwork has been included in over 90 exhibitions, and she is the author of Launching The Imagination: A Comprehensive Guide to Basic Design. In connection with a Fulbright Fellowship she received in 2019, she helped to expand the Atlantic Centre for Creativity website and served as the guest editor for the first edition of its journal.

TONY MERZETTI | OCTOBER 1

The Accidental Filmmaker

Tony will relate his story as an MBA graduate who turned his back on a traditional, safe, prosperous career in accounting or banking for the uncertain prospects of entering the world of film in New Brunswick in the 1980s. Through his journey, he will relate the life lessons he picked up on the way, and how he balanced film creation activities with paid work in the film sector. Tony Merzetti has been involved in the New Brunswick film community since the mid-80s. He is Executive Director of the NB Film Co-op, a part-time film lecturer at UNB, a filmmaker and crewperson on numerous films primarily in the fields of cinematography and editing.

DR. CASEY BURKHOLDER | OCTOBER 8

DIY Media Making, Activisms and Community Building within and Beyond the COVID-19 Pandemic

In this talk, Casey will highlight modes of shifting practices and seeking to create communities through art production and across social distances amidst Covid-19. Dr. Casey Burkholder is an Associate Professor at the University of New Brunswick, interested in critical teacher-education and participatory visual research. In choosing a research path at the intersection of resistance & activism, gender, inclusion, DIY media-making, and Social Studies education, Casey believes her work may contribute to 'research as intervention' (Mitchell, 2011) through participatory approaches to equity and social change.

DR. DANIELLE HOGAN | OCTOBER 15

Showing Up for Scraps

Inspired by different networks of care, in this talk, Danielle speaks to the repercussions (both positive and negative) of affect, and how, when considered in relation to textiles in contemporary art, the affect often leads to a particular assessment of value, which she terms Femaffect. Danielle Hogan (Ph.D.) is an interdisciplinary artist, writer, curator and practice-informed researcher. Currently, she is responsible for New Brunswick's provincial art collection, collectionArtNB.

GILLIAN DYKEMAN | OCTOBER 22

Good Vibrations: Art is Energy

This talk will focus on Gillian's recent artwork: Revolution Revolution, an exercise class, based performance. How do we better engineer our energetic outputs to formulate new ways of being…to radically reimagine what it is we're doing with our lives? Our life-force? Our love? Gillian Dykeman is a multi-disciplinary artist, instructor, and arts writer based in Fredericton, New Brunswick. Dykeman's artwork is grounded in intersectional feminism and performance-based practice with a focus on inviting in the radical imaginary.

THADDEUS HOLOWNIA | OCTOBER 29

A Love Affair with Looking

Thaddeus Holownia is a visual artist, letterpress printer, publisher and professor emeritus after forty-one years at Mount Allison University in the department of fine arts. Holownia is a Fellow of the Royal Society of Canada, a Fulbright Fellow and an elected member of the RCA.

JILLIAN ACREMAN | NOVEMBER 5

Navigating the World of Short Films and Features

In this talk, Jillian will lead us through the process of transitioning from directing short films to features, and how these two forms both differ and draw from one another. Jillian Acreman has been making short films since 2009 and recently wrote and directed her first feature-length film, "Queen of the Andes." Acreman is currently an instructor of Digital Media and teaches in Foundation Visual Arts at NBCCD.

CHARLES GAFFNEY | NOVEMBER 12

Becoming an Indigenous Artist

This presentation explores the journey into and through the creative life as an Indigenous artist, honouring Indigenous ways of being and knowing. Charlie Gaffney is a Wolastoqiyik Visual Artist and Educator. Charlie has been carving since 1988 and was taught initially by master carver Ned Bear. Charlie has been the recipient of grants from the New Brunswick Arts Board for his Indigenous Mask and Paddle creations. His artwork is represented in private and Canadian Government collections also, throughout Asia, Australia, England and the USA.

ELIZABETH DEMERSON | NOVEMBER 19

Harvesting the Wild

Elizabeth Demerson talks about harvesting natural materials, like rock and ash, for utilizing in ceramic processes. Elizabeth Demerson is the Coordinating Instructor of the Ceramics Diploma program at NBCCD. Before teaching in Ceramics, she was the Coordinating Instructor for Indigenous Visual Arts. Liz has a Master of Arts in Socio-Cultural Anthropology from Concordia University, a Bachelor of Education and Bachelor of Arts: Anthropology & Women's Studies from the University of New Brunswick, and a Diploma in Fine Craft Ceramics from NBCCD.

TRACY AUSTIN | NOVEMBER 26

Fashion as Craft and the Creative Process

In this talk, Tracy expands upon her creative process and her career that includes both production and contemporary art. She will speak about the art of fashion, as well as its inclusion in the world of craft. Tracy Austin is a fashion artist who creates fully functioning miniature textile sculptures that capture emotion and visage. Her contemporary practice is inspired by nature and is fused with a dark and rich gothic style. She has worked at NBCCD for over 10 years and is the current Coordinating instructor of the fashion department.

PETER THOMAS | DECEMBER 3

An Interview with Peter Thomas: A Rhizomatic Journey through Stories and Reflections.

In this informal discussion, guided by interview questions, Thomas will share stories and considerations on the creative life. Peter Thomas is internationally known as both an artist and a teacher. He has exhibited in exhibitions in Canada, the United States, Scotland and England. Peter obtained his first degree at the Edinburgh College of Art in Scotland, where he later completed a Post-Graduate Fellowship. He received a Master of Fine Art in ceramics and printmaking in 1967, from the prestigious Claremont Graduate School, a university dedicated to graduate research in California. Peter was Studio Head of Ceramics and is now instructing Fine Craft Ceramics at the New Brunswick College of Craft and Design.

JACKIE BOURQUE | DECEMBER 10

What If?

This talk is about exploration, investigating change, embracing the new and 'what if?' of practice. Jackie Bourque has a Diploma in Textiles from NBCCD and has been weaving for 30 years. She is an Instructor of weaving at NBCCD, in addition to having a vibrant studio practice. Her production involves hand-dyed woven and silk scarves, as well as conceptual gallery exhibition work. Jackie's work was selected for the Beneath the Surface: Fundy National Park Residency. The photos she created were exhibited in four locations in New Brunswick – Fredericton, Sussex, Saint John, and Restigouche. ∎

The series is **FREE AND OPEN TO THE PUBLIC.**

Join the Series **Here on Facebook.**

Watch the lectures on Zoom at this link:

bit.ly/guest-lecture-series

For further information or to receive updates, please contact: **Jean.Rooney@gnb.ca**

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