

An arts-based approach to facilitating systems thinking in student leadership programs

by

Valeria Cortés Acosta
M.Ed., Tecnológico de Monterrey, 2006
B.Sc., Tecnológico de Monterrey, 2000

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of the Requirements for the Degree of

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Supervisory Committee

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Abstract

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This study explored the implementation of Image Theatre as a means to developing systems thinking in a co-curricular student leadership development program at the University of Victoria. The research question asked: *In what ways does the implementation of an arts-based pedagogical approach, such as Image Theatre, illustrate the potentiality for undergraduate students to better understand ‘the bigger picture’ and the interconnections of their intersecting social systems?* This inquiry was conducted through an arts-based methodology and used the Social Change Model of Leadership Development (Higher Education Research Institute, 1996) as a theoretical framework for designing the student leadership program. The study was conducted during a workshop in which Image Theatre and graphic recording were used in parallel to trace connections among the characters portrayed by six undergraduate students interested in environmental sustainability. The themes that emerged included the tensions of individuals ‘caught in the middle’, or system’s integrators, and the role of activism. The study’s findings suggest students’ understanding of systems as fragmented units and identifies the potentiality for further research and intentional practice emphasizing the interconnections and relationships among systems within the curriculum.

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Dedication

Para Aurora, mi luz.

1. Introduction

[Facilitator's voice]

When we don't see systems, we fall out of the possibility of partnership with one another; we misunderstand one another; we make up stories about one another; we hurt and destroy one another; we become antagonists when we could be collaborators; we separate when we could remain together happily; we become strangers when we could be friends; we oppress one another when we could live in peace. All of this happens without awareness or choice. (Oshry, 1996, xii)

The major problems of our time cannot be understood in isolation because of their complex and systemic nature. They are interconnected and interdependent: a tangle of our individual goals and actions, as well as our ideological and institutional underpinnings. For example, climate change, one of the greatest threats of our time, is triggered and reinforced by our capitalist economic system, which immerses us in a cycle of consumption and planned obsolescence, as well as excessive and irresponsible resource exploitation; it is enabled by our lack of awareness about long-term consequences and our compliance; by our deliberate or innocent ignorance of the impact of our actions; and by industry's and governments' lack of regulation among other triggers. These actions collectively constitute and reinforce a set of dynamics that, on the whole, brings about environmental devastation. They are a normative consequence of the system of our civilization, and at the same time they pose a threat to the system itself.

I worked in the field of Student Leadership and Higher Education for over a decade and grasping the complexity of our social systems led me to question the effectiveness of my practice: Was I effectively facilitating the learning and development of students as agents of change in a global, complex, and interconnected world? I did not think so. This

realization motivated me to engage in research and explore other ways of educating for leadership and social change.

In Higher Education, scholars and educators are advocating for a paradigm shift based on a systems approach, that is, an ability to apply specific knowledge, skills, and attitudes to solve the complex problems of the world: “Under the old academic paradigm, educators broke down complex problems into piecemeal components –under the new academic paradigm, we recognize the interconnectedness of the problem of social inequities, racism, exploitation of the environment, and exploitation of people” (Longerbeam, 2008, p. 5). Instead of breaking things down, this new approach focuses on understanding the bigger picture.

Through this research, I attempted to respond to the call for that new academic paradigm, for engaging in innovative ways of educating, learning, and practising leadership. I chose to introduce *systems thinking* -a paradigm that highlights relationships, patterns, and interconnections- into the world of student leadership education because I believe that the systems thinking paradigm might enhance student leadership programming and, most importantly, student learning. As a result, students, leadership educators, and all involved in the student leadership development *system* might engage in social change and contribute to creating a more just and sustainable society.

Systems thinking has been shown to help people solve complex problems (Booth Sweeney, 2007; Senge et al., 2012; Richmond, et al., 2010). It implies a shift of perspective from contents to patterns; from objective knowledge to contextual knowledge; and from structure to process (Capra, 2009). There is no consensus on a specific pedagogy to teaching systems thinking. Yet, it may be that some pedagogical approaches,

particularly theatre-based, are well suited to deconstruct complexity because of their potential to address issues in ways that that feel more relevant and real to people.

Theatrical activities are often able to grab everyone in the room, particularly when participants create the work, recognize it, and can be pulled into it. This is because “people must want to effect change in what they see. They need to see a clear opportunity to get involved and to explore options” (Rohd, 1998, p. 97). Theatre can be a reflection of reality and can draw participants to explore a territory that they know: the relationships in their lives and the systems that influence them.

I intentionally interweave the fields of Systems Thinking and Student Leadership through Image Theatre, a technique that is part of the repertory the late Brazilian director and activist Augusto Boal (1979) who developed the *Theatre of the Oppressed* based on theories of popular education attributed to Paulo Freire (1982). Image Theatre is a form of representation and inquiry where participants use their bodies, rather than words, to create still images and explore abstract concepts or portray complex realities. Choosing Image Theatre as the backbone for this research was not an arbitrary decision. I have experienced the transformational power of theatre as an actress and through my practice facilitating Boal’s techniques. Most recently, through the work of Canadian director David Diamond (2007), who developed *Theatre for Living*, my motivation to explore systems thinking through Image Theatre grew. Diamond argues that in order to discuss living social systems “...we must first be willing to take a step outside the mechanistic Cartesian paradigm and accept that everything around us may be interconnected in nonlinear ways...” (p. 46). In other words he believes that theatre-based activities have an untapped potential to facilitate the understanding of the bigger picture.

Image Theatre facilitates a process that allows participants to both embody and enact their ideas. It makes thought visible, uncovering hidden meanings, assumptions, and mental models; it also raises awareness about the cyclical nature of behaviours within systems. Therefore, a systemic approach to facilitating Image Theatre might help students better understand and navigate the complex task of engaging in leadership and effecting change

The context: Co-curricular Student Leadership Programs

In the field of Student Leadership, many educators believe that leadership is a process that can be learned and, thus, educational programs are designed to enhance the development of leadership efficacy and competency in all students—those who hold formal leadership positions as well as those who do not—and to promote a group process that is inclusive and actively engages all who wish to contribute (Dugan, 2011; HERI, 1996; Wagner, Ostick & Komives, 2010). This student leadership paradigm is based on the understanding that the capacity to engage in leadership occurs through working with others in a change activity (Dugan & Komives, 2007). Under this paradigm, student leadership educators and professionals encourage students to engage in co-curricular, informal and non-formal learning such as student societies, organizations, clubs, or community service projects because these activities are, among other things, unique opportunities to practise leadership.

Student leadership is understood to be a conscious and intentional process and, thus, most student leadership programs provide the space and structure for such learning to happen. The basic purpose of student leadership programming is to provide a knowledge base (leadership education), to facilitate the acquisition of skills (leadership training), or to

assist in a developmental process (leadership development), thus, complementing and supporting the experiential learning that an involvement opportunity provides.

Co-curricular student leadership programs are a mode of non-formal education because they are not obligatory and are usually offered outside of the formal classroom and academic curriculum. These programs exist in a variety of formats, such as conferences, service-learning activities, capstone projects, developmentally sequenced modules that result in leadership certificates, mentorship, and advising activities and so forth.

Many student leadership scholars and practitioners are calling for new ways of learning, teaching, and practising leadership (ACPA, 2008; Fincher & Shalka, 2009; Komives, Lucas, & McMahon, 2007). The most popular student leadership models and scholarly work in the area highlight community engagement and change projects as essential components of the leadership process. This focus on social change is aligned with the intention of many universities to prepare students as global citizens and to develop their civic and social responsibility. Therefore, Leadership Educators have the opportunity to enhance their knowledge, innovate and expand the scope of leadership development programs by facilitating the understanding of the complexities of the social systems in which students are expected to operate.

One of the most popular and widely implemented models of student leadership development in co-curricular and curricular contexts is the Social Change Model of Leadership Development (HERI, 1996). “The ultimate aim of leadership development programs based on the proposed model would be to prepare a new generation of leaders who understand that they can act as leaders to effect change without necessarily being in

traditional leadership positions of power and authority” (p. 12). The model promotes a process-oriented view of leadership and leadership development. It encourages a nonhierarchical approach, meaning that it is not necessary to have an elected position, or a title in order to participate in a group’s leadership process. The model emphasizes commitment to making a difference through serving the community rather than the pursuit of positions of power. Its major assumption is that leadership is ultimately about change, particularly change that benefits others in our local and global communities.

The Social Change Model (SCM) of Leadership Development provides the framework to this study because it highlights the interconnections of three spheres of influence: the individual, the group and the larger community, allowing for the exploration of systems thinking as a way of engaging in leadership for social change.

An opportunity to contribute to the Student Leadership field

I worked in Student Leadership for over a decade, mostly focusing on leadership training and development within student organizations. My main goal was to equip students with the skills needed to work effectively with others. As a result, many of the programs I designed focused on group and organizational development skills such as interpersonal communication, group facilitation skills, conflict resolution, meeting management, fundraising, event planning, goal setting, succession and transition, and other topics. Even though I used the Social Change Model of Leadership Development as a framework, I fell short of providing the students with the perspectives, knowledge, and skills needed to understand and to facilitate systemic change.

Through this research, I propose to enhance the capacity to understand the bigger picture and promote students' learning outcomes by including systems thinking in the student leadership curriculum and discourse.

Purpose and Objectives of the Study

This thesis reports on a study that explored, through an arts-based approach to inquiry, how the implementation of Image Theatre activities in a student leadership program facilitated the development of systems thinking in a self-selected group of undergraduate students involved in a change project at the University of Victoria. The study responded to the research question: In what ways might the implementation of an arts-based pedagogical approach, such as Image Theatre, illustrate the potentiality for undergraduate students to better understand the bigger picture and the interconnections of their intersecting social systems?

Through this research study I became an advocate for arts-based learning as a way to ease the implementation of student leadership programs that include systems thinking learning outcomes. I will disseminate the research process and findings to the wider academic community and to those whose main responsibility is to design and implement student leadership programs. Specifically, I have a responsibility to share the findings with my colleagues through the Canadian Association of Colleges and Universities Student Services (CACUSS), as they funded this research study. The results of this study will contribute to the body of knowledge of student leadership, in its intersection with systems thinking, and might inspire other student leadership educators and scholars to keep exploring ways in which systems thinking and the arts can be integrated in the field.

Significance of the Study

The state of the world demands a new sense of urgency, new educational approaches, and certainly new ways of thinking, particularly those that emphasize how to engage in global problem solving. Many scholars and practitioners suggest that systems thinking is essential in the effective understanding and solving of the complex dynamics at the core of many of the problems that our society faces, such as inequity, environmental degradation, and climate change (Booth Sweeney & Sternman, 2007). However, in the field of student leadership, research on the intersection of leadership, systems, and complexity is scarce (Komives, Lucas, & McMahon, 2007). This study contributes to the body of knowledge in such area and does so by raising awareness of the potential of arts-based learning to explore systems and to facilitate the understanding of the bigger picture.

This research informs the practices of student leadership educators who want to improve their professional practice by including systems thinking knowledge, skills and habits in their programs using an arts-informed framework. The value of the study lies on the potentiality for students to be better prepared to solve problems and address the systemic issues of the 21st century.

Finally, through this study I took a close look at my practice as an educator and facilitator and better understood my weaknesses and my strengths in order to take specific steps towards the development of my competencies and the enhancement of my practice.

Limitations of the Study

Given the limitations of time, design, and scope, I focused only on one of six workshops, and I explored only one arts-based technique: Image Theatre. However, there is much more exploration that can be done through other arts-based pedagogies such as

Forum Theatre, story telling, or other art forms. Also, the study focuses only on one of the many concepts of systems thinking, the understanding of the bigger picture, how we are all interconnected. In this regard, the need for further exploration is required.

The design of the study yielded far more data than could be included. In the end I analyzed very specific aspects of the data, those that were most relevant for me as a facilitator and that allowed me to respond my research question. This study was not intended to generate data that could be generalized, as each educational context will call for different ways of implementing theatre-based learning. Nevertheless, I believe the findings of this study might inform and be of use to similar efforts in different contexts.

The participants of the study do not reflect the ethno-cultural diversity of the student population in Canadian higher education, therefore many voices and experiences were not represented in this study. However, it is essential to acknowledge the need for a thorough planning to ensure diversity and inclusivity in any educational program.

Further, there are three major challenges to a systems approach to leadership: First, research in this area is lacking; second, some concepts are abstract and difficult to define and understand, and, third, their holistic approach makes measurements difficult (Komives, Lucas, and McMahon, 2007). This suggests that the world of systems thinking is not entirely accessible and that it operates within a privileged and elitist discourse. I acknowledge that the systems thinking framework that I describe has been developed by and for a privileged group of academics and practitioners. Indeed, other ways to explore the research question that I pose can be considered, particularly the holistic worldview of indigenous traditional knowledge.

Although my ultimate goal is to effect social change through education, I am part of a system of privilege: universities function within a hierarchical social structure that provides a significant advantage to the privileged. I am aware of my position educating the privileged, but I sincerely believe that my work can be transformative and that university students have the potential to make the changes needed in our society.

My stance as educator, artist, and researcher

Identities are fluid and blended, they are like Bishop's (2012) red yarn metaphor of *threads spun together*. I describe my stance as an educator, artist, and researcher separately but during the research process these roles were intertwined and ever present. These overlapping identities influenced the choices I made and at times, as I describe in chapter five, they emerged as contradictory and troubling.

My stance as an educator evolved once I understood and experienced the new paradigm of leadership as a process. I realized that, as a leadership educator, I had something valuable to offer. I decided that my role was bigger than only designing and implementing an educational program. I had a responsibility beyond offering a service for students. I chose to educate and to become an advocate for social change, for a just and environmentally sustainable society, which means focusing on the root causes of problems rather than only tackling the surface. That is my stance as an educator. I also acknowledge that I operate in a system of privilege and that makes my role even more important. Upon graduation students will make decisions that will impact others, and if only they leave university with the ability to think in more systemic ways, our society will definitely benefit.

The stance that I chose to take as a leadership educator led me to reconsider my identity as a *facilitator* or Joker, as the role is known in popular theatre spheres in reference to the neutrality of the joker in a card deck. However, as Boal (1995) suggests sometimes it is necessary to turn into a *difficultator* (cited in Prendergast & Saxton, 2009, p.70) a term Vancouver-based director David Diamond, creator of Theatre for Living, also uses in his training to describe his role. The theatrical work is deep, it is embodied and emotional. A lot of information lies underneath the verbal comments of participants and my role is to surface the hidden ideas, emotions, relationships, to help participants name what the images are communicating. In Jackson's (2012) words "the joker figure is...the director, referee, facilitator and workshop leader" (p. xxvi). According to Boal (1992) the facilitator or *Joker* must be *maieutic*, and like a midwife, facilitate the birth of ideas. To take into account body, mind, and spirit, the whole. As a joker, my role is to generate participation and recognition of complexity. It is very challenging because it requires full commitment and focus from everyone involved. In my role as a joker, I transform into an artist and encourage the creation of characters and stories when activating an image. When possible I help participants connect with their creative spirit, to have a conversation with their bodies, to feel rather than think, to embody the learning, the transformation.

Through the study, I was aware of the overlapping and contradictory motivations as joker and researcher. The joker has the power to manipulate and influence participants, but as a researcher I had to be cautious, for instance, to state conclusions in an interrogative rather than an affirmative tone. I acknowledge that I carry certain biases and that makes the work even more challenging because as a facilitator/joker I had to identify the unconscious thoughts and emotions of the group but from a methodological perspective, I

was part of the research process and my presence, emotions, interpretation of events, along with my identity as an immigrant Latin American woman, and mother were key aspects of the process.

My journey as a researcher was challenging. It involved reconsidering my epistemological approach and shedding expectations of how knowledge is acquired and how research should be done. I abandoned the conventional research paradigm deeply embedded in my engineering education and heavily influenced by experimental scientists around me. At the same time, the arts –particularly Popular Theatre and the variety of techniques that emerged as tools for raising consciousness, empowering people and mobilizing collective action- absorbed me in a way that traditional research methodologies never did.

Traditional research methodologies have much value in the right circumstances. However, “the arts open up domains that might well remain transparent to us if we worked only in the linear scientific mode” (Etmanski, 2007, p. 72). Arts-based methodologies offer a fresh and promising way to look at societal problems. Popular Theatre has already helped me understand deeply complex phenomena by uncovering the many layers of motivations and relationships hidden within a given situation. It has shaped who I am and I believe in its potential to transform our lives.

What is inside this for you?

This thesis resembles a braid. The first thread is Systems Thinking, which I introduce through a traditional Iroquois story that provides more richness to the concepts than the diagrams that are used to represent relationships in this field. Rather than approaching the literature from a fragmented perspective, I intentionally braided the

theoretical framework in chapter three, the threads of Student Leadership and Image Theatre with those of Systems Thinking. The crystal metaphor was the basis for chapter four, where I describe the methodology, and for chapter five, where I describe the exploration of the study from different angles. I imagine chapter six as *drilling* because I go deeper in exploring two images in particular. In chapter seven, I focus on the implications for practice, and conclude in chapter eight with *Three Strands in the Braid*, another Iroquois story that reflects the essence of this work.

Throughout the document I use the *facilitator's voice*, it represents my identity as a student leadership educator and facilitator and aims to provide a closer understanding of the workshop process and the techniques implemented in this study.

During the *Theatre for Living Training Workshops* director David Diamond invites participants to make meaning of the learning that the theatrical process carries by asking *what is inside this for you?* I invite readers to consider that question as well.

2. Who speaks for Wolf? Understanding Systems Thinking through a Native American Story

(Abbreviated excerpt, Underwood, 2002, p. 13-37)

Long ago

*Our People grew in number
so that where we were
was not longer enough*

Many young men

*were sent out from among us
to seek a new place
where the People might be who-they-were*

They searched

*and they returned
each with a place selected
each determined his place was best*

And so it was

*That the People had a decision to make:
which of the many was most appropriate*

Now, at that time

*There was one among the People
to whom Wolf was brother
He was so much Wolf's brother
that he would sing their song to them
and they would answer him*

He was so much Wolf's brother

*that their young
would sometimes follow him through the forest
and it seemed they meant to learn from him*

So it was, at this time

*That the People gave That One a special name
They called him Wolf's Brother*

As I have said

*The people sought a new place in the forest
They listened closely to each of the young men
as they spoke of hills and trees
of clearings and running water
of deer and squirrel and berries*

They listened to hear which place

*might be drier in rain
more protected in winter
and where our Three Sisters
Corn, Beans, and Squash
might find a place to their liking*

They listened

and they chose
Before they chose
they listened to each young man
until they reached agreement
and the Eldest among them
finally rose and said:
“So be it - -
for so it is”
“But wait”
Someone cautioned - -
“Where is Wolf’s Brother?
Who, then, speaks for Wolf?”
But
The people were decided
and their mind was firm
And then Wolf’s Brother returned
He asked about the New Place
and said at once that we must choose another
“You have chosen the Center Place
for a great community of Wolf”
But we answered him
that many had already gone
and that it could not wisely be changed
and that surely Wolf could make way for us
as we sometimes make way for Wolf
But Wolf’s brother counselled - -
“I think that you will find
that it is too small a place for both
and that it will require more work than - -
that change would presently require”
But
The People closed their ears
and would not reconsider
When the New Place was ready
all the People rose up as one
and took those things they found of value
and looked at last upon their new home
And The People saw that this was good
And did not see
Wolf watching from the shadows!
But as time passed
They began to see --
or someone would bring deer or squirrel
and hang him from a tree
and go for something to contain the meat
but would return

*to find nothing hanging from the tree
and Wolf beyond*

At first

*This seemed to us an appropriate exchange - -
some food for a place to live*

But

*It soon became apparent that it was more than this --
for Wolf would sometimes walk between the dwellings
that we had fashioned for ourselves
and the women grew concerned
for the safety of the little ones*

Thinking of this

*they devised for a while an agreement with Wolf
whereby the women would gather together
at the edge of our village
and put out food for Wolf and his brothers*

But it was soon apparent

*That this meant too much food
and also Wolf grew bolder
coming in to look for food
so that it was worse than before*

We had no wish to tame Wolf

And so

*the men devised a system
whereby some ones among them
were always alert to drive off Wolf*

And Wolf was soon his old untamed self

But

*They soon discovered
that this required so much energy
that there was little left for winter preparations
and the Long cold began to look longer and colder
with each passing day*

Then

*The men counselled together
to chose a different course*

They saw

*That it was possible
to hunt down this wolf People
until they were no more*

But they also saw

*That this would require much energy
over many years*

They saw, too

*That such a task would change the People:
they would become Wolf Killers*

*A people who took life only to sustain their own
would become a People who took life
rather than move a little*

It did not seem to them

That they wanted to become such a People

At last

*One of the Eldest of the People
spoke what was in every mind*

*“It would seem
that Wolf’s Brother’s vision
was sharper than our own*

*To live here indeed requires more work now
than change would have made necessary”*

Now this would be a simple telling

*Of a People who decided to move
Once Winter was past*

Except

*That from this
The people learned a great Lesson*

It is a lesson

We have never forgotten

For

*At the end of their Council
One of the Eldest rose again and said:
“Let us learn from this
so that not again
need the People build only to move
Let us not again think we will gain energy
only to lose more than we gain*

Let us now learn to consider Wolf!”

And so it was

*That the People devised among themselves
a way of asking each other questions
whenever a decision was to be made
on a New Place or a New Way*

We sought to perceive the flow of energy

*through each new possibility
and how much was enough
and how much was too much*

Until at last

*Someone would rise
and ask the old, old question
to remind us of things
we do not yet see clearly enough to remember*

*“Tell me now my brothers
Tell me now my sisters
Who speaks for Wolf?”¹*

¹ I acknowledge and give thanks to Paula Underwood (1994; 2002) and the Iroquois peoples who have shared the stories shown in this thesis.

Stories enable us to learn from each other as much as we learn from the words, the images, and the questions that emerge. Paula Underwood (1994), the keeper of the Old Things for the Iroquois tradition, was committed to enabling the capacity to learn through stories and stated that *Who Speaks for Wolf?* was “an excellent stimulus for higher-level thinking skills” (p. 17). As a way to expand my knowledge on related topics, I learned about indigenous traditional philosophy, centered on the holistic view that everything is interconnected, and I found that this Iroquois story carries with it many of the elements of systems thinking that I want to communicate (understanding the bigger picture, identifying the circular nature of relationships, or finding where unintended consequences emerge). In the next section, I provide an overview of the world of systems thinking and describe the arts-based framework that I adapted and implemented in my study as a way to develop systems thinking.

Who Speaks for Wolf? provides an opportunity to understand the concept of systems thinking. At first glance, the story highlights the importance of considering all perspectives as a way to increasing understanding, “*Tell me now my brothers. Tell me now my sisters. Who speaks for Wolf?*” But there is more. It is possible to understand the bigger picture by identifying the social system, the People in need of settlement; its actors –the men, Elders, women, children; and their relationships with other actors such as Wolf, fear, or the territory. The story allows us to ask questions that lead to the understanding of motivations or needs: Why did the community not listen to Wolf’s Brother? What questions need to be asked in order to understand the bigger picture, to take into consideration the whole system? It also presents a very real scenario, people in the story have good intentions all

along and engage in participatory decision-making processes where alternatives are pondered. They truly believed they had made the right choice:

*...many had already gone
and that it could not wisely be changed
and that surely Wolf could make way for us
as we sometimes make way for Wolf...*

Understandably, the community did not consider the long-term consequences of such decision and the impact of dismissing Wolf's Brother advice. Through the story it is also possible to identify certain patterns and circular cause and effect relationships, which are the basis of systems thinking. For example, once the problem is evident, the community reacts by setting aside food for Wolf, which in turn takes away from their stock for the winter, and makes Wolf grow bolder. This in turn makes the men drive off Wolf, which takes too much energy and again hinders the preparations for the winter. These decisions not only reinforce the original problem but also create additional problems. The pattern can be traced: the actions taken towards Wolf, have an impact on the preparations for winter and diminish the resiliency of the People.

In addition, the story gives a good example of unintended consequences, another highlight of systems thinking. Two groups that seemed to have had good relationships slowly turn into adversaries, and the potentiality for the People becoming Wolf killers emerges. Although this outcome was not at all the intention of the community, the system itself (their decisions and the way their behaviour changed over time), resulted in a bigger problem that affected many other aspects within the same system: perspective, safety, food, resources, and behaviour.

Systems thinking implies looking at the bigger picture and at the relationships and patterns that emerge among the elements. The field of systems thinking has developed a

specific language and tools to aid the understanding of the complexity that accompanies this way of perceiving the world. I describe them briefly in the following section.

The language of systems thinking

Learning systems thinking is similar to mastering a foreign language. Along with practise and full immersion, becoming fluent at a language requires learning its elements and structure, but also understanding the surrounding culture of the language –the worldview (Goodman, 2008). The language of systems thinking includes concepts such as *unintended consequences, behaviour over time, cause and effect relationships, feedback loops, leverage actions*, and more.

From an educational perspective, I am advocating for students to acquire systems thinking knowledge, skills, and attitudes or habits. Many scholars and practitioners (Benson, 2006; Booth Sweeney & Sterman (2007); Plate, 2006) are already devoted to this task. For example, the Waters Foundation Systems Thinking in Schools framework, focuses on building the capacity of teachers to effectively apply systems thinking concepts, habits, and tools in classroom instruction and school improvement. Their approach to learning systems thinking is relevant for this study because it describes thirteen habits that students can acquire, practice, and develop; and suggests learning outcomes and rubrics that educators can use. Such habits illustrate various kinds of thinking and approaches to problem solving (Appendix A). In this study I specifically explore the habit *seeks to understand the big picture*, that describes that “a systems thinker “steps back” to examine the dynamics of a system and the interrelationships among its parts” (Waters Foundation, 2006).

The tools and graphic representations of systems thinking

Modeling and mapping constitutes the visual language of systems thinking. Through causal loop diagrams, behaviour over time graphs, or systems archetypes a system can be visually understood. Many systems thinking practitioners engage in this practice as a way to ‘make thought visible’, thus increasing understanding and learning through a common language that provides some precision.

Causal loop diagrams provide a language for articulating our understanding of the dynamic, interconnected nature of our world. Its elements usually include *stocks*, measurable elements –material or information- built up over time; *flows*, which are the actions that affect the stock; and *feedback loops*, which are formed when changes in a stock affect the flows into or out of that same stock. There are balancing feedback loops, which seek stability, and reinforcing feedback loops, which continuously amplify their effects (Figure 1). Other elements include time graphs, which allow to identify what elements are changing over time and to understand patterns.

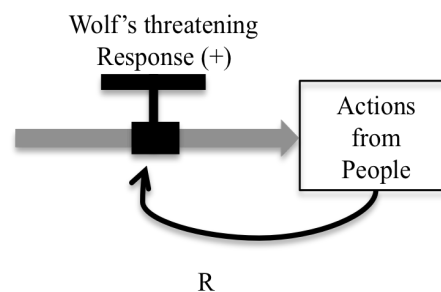


Figure 1. Reinforcing feedback loop diagram

Systems archetypes are another element of the language of systems thinking. They can be seen as an analogy to idioms, phrases in common use whose meaning is not deducible from that of its individual words. Systems archetypes are systems structures that produce problematic behaviours. They are very prevalent and should be recognized in advance

(Meadows, 2008, p. 112). A common systems archetype is the *fix that fails*: quick fix solutions that worsen a problem. For example, leaving food for Wolf is a fix that fails. Other known archetypes are *limits to success*, having something great going and then stalling; *shifting the burden*, when a symptomatic solution is applied to a problem, alleviating the symptom and reducing the possibility to implement a fundamental solution; or *escalation*, a perception of threat that causes one party to take actions that are then perceived as threatening by the other party, reinforcing spiral of competition. These archetypes are usually explained through reinforcing and balancing loops, representing the patterns of the behaviours we experience in many systems.

Leverage Points

There are places in the system where a small change can lead to a large shift in behaviour. Such places are known as leverage points. Interestingly, people who are deeply involved in a system and seem to know intuitively where to find the leverage points, usually push the change in the wrong direction (Meadows, 2008). There are many frameworks around systems change but the one that is relevant for this study is *transcending paradigms*, a leverage point that help us develop open-mindedness and flexibility.

The systems thinking language is in itself complex, it can become overwhelming, and it can certainly feel inaccessible and privileged. For this reason the arts play a key role in making this language accessible to anyone because, in the end, systems thinking represent a language of relationships.

A theatre-based systems thinking framework

I am not an expert in systems thinking. My intention is to build bridges between different fields of study, and most importantly, to contribute –somehow- through my practice to solving the complex problems of our time. I acknowledge that there are many ways in which systems thinking can be taught and I discuss some in chapter three where I also describe the relationship between Systems Thinking, Image Theatre, and the Social Change Model for Leadership Development.

In order to integrate Image Theatre and Systems Thinking in the curriculum for this research study I developed a model based on the Systems Thinking in Schools (2006) Iceberg Visual (Appendix B) a framework that illustrates the levels of a system through a powerful iceberg metaphor that shows how we tend to focus on what is visible in a situation. The metaphor helps individual and groups understand the bigger picture of how a system operates “acknowledging aspects of the system from the discrete events, through the dynamic patterns, structures, and underlying mental models and beliefs that are often unseen” (Systems Thinking in Schools, 2006, par. 2). My adaptation of the Iceberg Visual helped me to better understand the questions I needed to ask as a facilitator of the process. In chapter four, I outline the questions that I used to debrief and joke in the *Understanding the Bigger Picture* workshop, and that complement the model below.

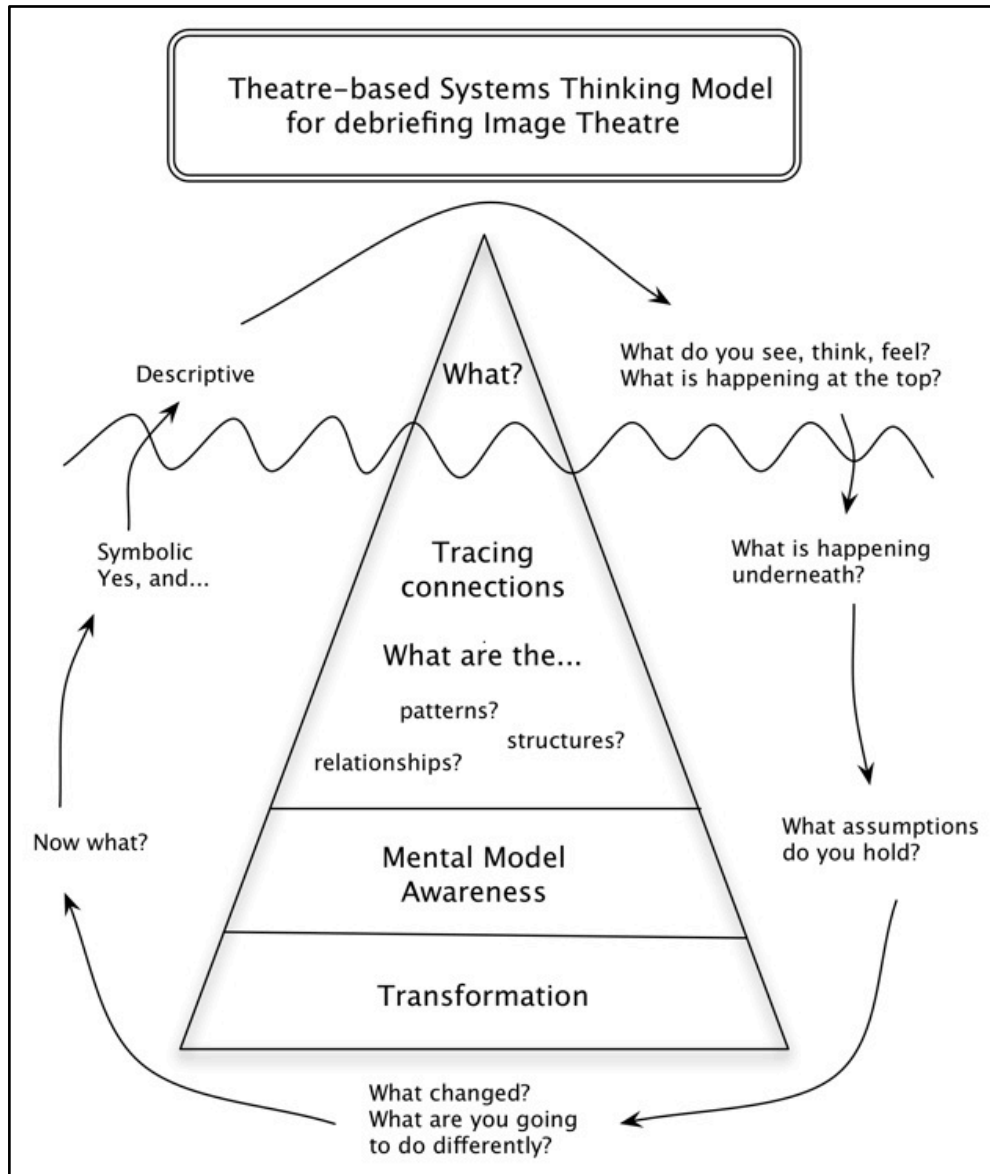


Figure 2. A theatre-based systems thinking model

The model represents the process of exploration that a facilitator/joker can use to intentionally explore systems thinking. The iceberg represents the complexity of reality and the potential that an image has: at first participants will see what is ‘above the surface’, possibly focusing on a description of the image, but there is more to explore: The model suggests that through the symbolism of the image it is possible to trace connections,

explore relationships, and identify patterns, therefore, raising awareness of the mental models and opening the space for the learning and transformation to occur. The arrows represent the dynamic and bi-directional nature of the process, the joker/facilitator follows a non-linear exploration where every piece of information has an impact on the next, thus, allowing for a flexible back and forth deconstruction of the image.

The relevance of systems thinking lies in the possibility to raise awareness of relationships, connections, and holistic views. “By learning the language of systems thinking we will hopefully change not only the way we discuss complex issues, but the way we think about them as well” (Goodman, 2008, p.3). The systems thinking language has given many scholars and practitioners a common way of expressing problems. And it has the potential to provide many benefits to student leadership educators who are interested in deepening the learning and actions of the students they serve.

3. Theoretical Framework

[Facilitator's voice]

“Stand facing your partner and decide who will be the sculptor and who will be the intelligent clay. The sculptor will shape the clay into an image that represents leadership. The intelligent clay will stay still and will fill the shape with thought and emotion indicated by the body position.”



Figure 3. The Leader

In my experience, when I invite the group of students to engage in Image Theatre as a way to deconstruct the concept of leadership, there are always a few participants who create images that represent the traditional, authoritarian, and individualistic forms of leadership, like the image above. However, when they describe what leadership means, students talk about the relationship between followers and leaders, among other things.

This incongruence between the leader as *hero* image and the notion of relationships is not surprising: reaching consensus on a leadership definition has been a challenge for scholars and practitioners for decades because, as Burns (1978) states, “leadership is one of the most observed and least understood phenomena on earth” (p.2). Certainly, it has been challenging for me, as a student leadership educator, to dislocate students’ previous normative notions of leadership and advocate for the recent theories and models that describe leadership as an inclusive group process where power is shared and everyone can participate.

In this chapter I intentionally braid systems thinking, student leadership, and Image Theatre threads and focus on how systems thinking intersects with Image Theatre and the Social Change Model of Leadership Development.

The New Paradigm of Relationships

Rost (1993) states that most of what was labelled *leadership* in the 20th century was, essentially, good management and describes how leadership has been constructed: theories that relied on specific traits, behaviours, or situations were a good fit in an industrial era when production and efficiency were the priority. However, leadership for the 21st century calls for a leadership paradigm that is relational, multidirectional, collaborative, and process-oriented.

Three models are among the most recognized and used in the student leadership field. First, the Relational Leadership Model that suggests that relationships are the key to leadership effectiveness because of its relational nature. According to Komives, Lucas and McMahon (2007), the foundation of the relational leadership model is that all involved should be and expect to be purposeful, inclusive, empowering, ethical and process-

oriented. This is an aspirational model that aims to propose effective group leadership but does not focus on social change outcomes. Second, the Leadership Identity Development Model (LID) (Komives, et al., 2006) describes how students develop a leadership identity over time through a developmental process. The grounded theory that supports the LID model proposes that undergraduate students take different leadership identities through their university experience, and that many variables, such as peers, mentors, group experiences, or self-awareness, determine the development of the leadership identity and the transition towards the understanding of leadership as a process. The strength of the Relational Leadership Model and the Leadership Identity Development Model is that they provide insight into the development of leadership efficacy and how to develop the understanding of leadership as a process. Like the Relational model, the LID does not address social change, but focuses on the development of the individual and the group over a period of time. The third model, the Social Change Model (SCM) of Leadership Development (HERI, 1996) provides the framework to this study because it is a systemic model that highlights the interconnections of three spheres of influence: the individual, the group, and the larger community, allowing for the exploration of systems thinking as a way of engaging in leadership for social change.

Image Theatre allows participants the opportunity to uncover the hidden authoritarian leadership beliefs that often exist in our social psyche, a step that is necessary to unlearn leadership and embrace new models. There is something about the arts that appeals to educators, not only for teaching leadership but also for systems thinking, particularly through stories.

Since relationships are the essence of the living world, one would do best...if one spoke a language of relationships to describe it. This is what stories do.

Stories...are the royal road to the study of relationships. What is important in a story, what is true in it, is not the plot, the things, or the people in the story, but the relationships between them (Capra, 1989, p. 78).

Both leadership as a process and systems thinking share the language of relationships and both call for a paradigm shift. Capra (1996) suggests that most of our societal problems are largely the result of a crisis of perception that derives from subscribing to an outdated view of the world that is inadequate for dealing with a globally interconnected world. Therefore, in this framework leadership is transformed from a hierarchical, authoritarian view of someone deciding and telling others what to do, to a paradigm where what matters is what happens in the group, the decision-making process. Systems thinking shifts from a linear, mechanistic and reductionist way of understanding the world, towards a holistic and interconnected one.

However, paradigm shifts are difficult. Research shows that systems thinking is a difficult concept to grasp (Booth Sweeney & Sterman, 2007), we use linear-thinking or local perspectives to deal with issues, and because these approaches have enabled us to do fairly well, we have acquired certain habits of thought that obstruct the awareness of an interdependent reality. This is not a matter of educational attainment; even highly educated adults have poor systems thinking skills (Booth Sweeney & Sternman, 2007; Brazelton, 1992; Grotzer & Bell Basca, 2003). Some suggest that schooling, with its fragmented and compartmentalized approach to education, inhibit students' thinking in terms of relationships and understanding patterns (Booth Sweeney & Sternman, 2007). Regardless

of the challenges of thinking systemically, research shows that systems thinking can be taught and learned (Bardoel & Haslet, 2004; Hiller Connell, Remington, & Armstrong, 2010; Goekler, 2003;). Similarly, leadership can be learned and developed through practise and reflection.

In the next section I draw from the literature to describe how Image Theatre relates to Systems Thinking and how, in turn, Systems Thinking relates to Student Leadership, particularly to the Social Change Model of Leadership Development.

The relationship between Systems Thinking and Image Theatre

Despite the claims that systems thinking can lead to beneficial cognitive and behavioural changes, there is little consensus about the efficacy of the various interventions and pedagogies implemented (Sweeney & Sterman, 2000). There are as many ways of teaching and learning systems thinking, as there are schools of systems thinking. Among the most recognized thinkers is Senge (1990) who advocates for placing the systems thinking language in the hands of teams in order to build more effective organizations, while realizing their personal visions. Richmond (1993), who strongly advocates for systems thinking and system dynamics as ways to develop critical thinking skills for the 21st century, focuses on the need of integrating those thinking skills in the educational system. Capra (2009) advocates for the need to include systems thinking, inherent in eco-literacy, in education all the way from Kindergarten to post-doctoral research and beyond. Capra is mostly known for his critiques of the reductionist/mechanist forms of knowledge production, including science as it is currently practiced. Meadows (2008) provides insight for problem solving through the implementation of the language of systems thinking and modeling. Macy (1991) highlights a major shift occurring in our

times from linear unidirectional causality to perceptions of dynamic interdependence where phenomena affect each other in a reciprocal fashion. She says that all living systems have a dual nature; they are wholes in themselves and simultaneously integral parts of larger wholes. Wheatley and Frieze (2006) describe how networks grow and transform into communities of practice, generating a new system with qualities and capacities unknown to individuals: this new state referred to as emergence is how life creates radical change and takes things to scale. Oshry (1995) describes the power in organizational systems and the different roles played by tops, middles, bottoms, and customers. He places a particular focus in *the middle* seeing that role as systems integrators. Oshry's power and systems framework is taught through a simulation in which participants run an organization and the various actors and relationships among them have to be taken into account in order to complete a given task and succeed. Simulations are widely applied in the field of systems thinking (Waters Foundation, 2006). There are known simulations like the beer game, a role-play that allows participants to experience coordination problems of supply chains and illustrates that a system's structure produces its behaviour; and other computer-based simulations that show how systems change, like water in a bathtub or cash flows, where it is easy to track the flow's input and output and the change in the stock. Other pedagogical approaches include computer models, games, case studies, inquiry-based approaches to problem solving, or narrative. Within the field of education, many scholars have applied systems thinking frameworks to their dissertations. For example, Sheppard (2010) used systems theory to examine factors influencing higher education.

The work of Booth Sweeney (2001) and Rosenthal (2003) are particularly relevant for this study because they provide insight on the intersection of systems thinking and the

arts. Booth Sweeney suggests a complementary approach to teaching children about social systems through stories; her educational approach is based on deconstructing the story following four steps: begin with what happened, trace cause-effect relationships, ask causal questions, and help children show what they already know. Her research findings suggest that stories have the potential to be an effective pedagogy to help identify and understand systems archetypes. Rosenthal (2003) proposes to teach systems thinking through environmental art in her courses, through the discussion of critical texts from diverse fields, and production of multi-disciplinary and collaborative art projects such as installations, performance, or habitat restoration, among others.

The relationship between Systems Thinking and Image Theatre lies in the potentiality for an arts-based pedagogical approach to facilitate the understanding of the bigger picture and relationships among the parts. Scholars have documented the power of the arts as a way to stimulate learning (Butterwick and Selman, 2003; Branagan, 2005; Clover, 2007; Etmanski, 2007; McGregor, 2012) All around the world, accounts of learning through music, dance, literature, poetry, role-play, drama, clowning, film, painting, or weaving show that such approaches provide a vehicle to address complex issues and develop increased understanding, creativity, solutions to problems, and action. Kolb and Kolb (2005) described arts education as an experiential learning process of demonstration that emphasizes showing and integrating theory and practice; in contrast, traditional education usually emphasizes conveying information as if the students were empty vessels that needed to be filled (Freire, 1982). Unlike traditional education, much of the time in an arts based learning is spent on the learner's expression of ideas and skills (Kolb & Kolb, 2005).

Laidlaw (2002) ties in science metaphors with collaborative and cooperative learning in drama education. She introduces the term *autopoiesis* to describe the self-producing organization of living systems. “Drama educators have long recognized the power of the collective for learning and have worked at creating pedagogical structures which draw upon collective knowledge and actions” (p. 18).

The arts have the potential to activate embodied, holistic, and transformational learning and to unsettle previously held thoughts, values or belief systems. Particularly, *Theatre of the Oppressed* (Boal, 1979), or popular theatre techniques, can be an engaging tool of inquiry into our own lives because they create space for the embodied study of cultural, economic or political issues, among others. Image Theatre, a popular theatre technique developed by Augusto Boal, is a descriptive method of representation, which means that an image --embodied by one or more people-- can offer different meanings to the observers. Participants are encouraged to use their bodies, rather than language, to portray and communicate realities and make thought possible (Butterwick and Selman, 2003; Cahnmann-Taylor & Souto-Manning, 2010). While participants become aware of and comfortable with expressing ideas, physical sensations, and emotions, they engage in a process of embodied learning and reflection. Etmanski (2007) states “...this is how arts-based methods can serve to draw out pre-conscious thoughts –thoughts that were inside the body, but not yet fully developed or articulated in the mind” (p. 105).

Generally, a number of people looking at the same image offer their reactions to it; this multiple reflection usually reveals to the image-maker its hidden aspects (Boal, 2002). According to Dirkx (1998) images are ways through which individuals and collectives potentially come to express and connect with their deeper reality. Images are message-

bearers of the soul, and consequently, represent the depth of our experiences. A similar idea is expressed by Diamond (2007) when he describes the process of creating images in pairs and then placing them together so that they tell a story:

The hands of the sculptor are conveyors of the sculptor's subconscious. When the whole group is engaged, the sculptures cannot help but reflect the subconscious of the group. Very often you will find that the core issues of the group are present in their very first group-sculpted images (p. 96).

Although Image Theatre was developed by Augusto Boal and it is usually placed under the *Theatre of the Oppressed* repertoire, this study is based on Diamond's *Theatre for Living* (TfL) framework. Rather than portraying Boal's so-called oppressor and oppressed relationships, TfL focuses on the complexities of all the different characters: the struggles and complexities of everyone: protagonists and antagonists. Diamond intentionally moves away from dichotomies and explores the complexity of social systems: he does so by his understanding of a community as an integrated living organism.

This is where Image Theatre, from a TfL perspective and systems thinking intersect. Diamond, influenced by Capra's quantum physics ideas, rejects the Cartesian mind/body dualism, and the divide between humans and the environment, and argues that modern science has failed to see the interconnectedness of all aspects of the universe. "Just as you are a collection of individual cells that make up your body, a community is a collection of individual people that make up the living organism of the community" (Diamond, 2004, p.8). Diamond, influenced by Capra (2002), also suggests that the theatrical work causes disequilibrium, which prepares the way for action and transformation. This perspective is deeply rooted in natural systems and change.

Boal (2002) also understood how human beings in communities are a whole and also how mind and body are connected: “the human being is a unity, an indivisible whole... All ideas, all mental images, all emotions reveal themselves physically...Bodily activities are activities of the whole body. We breathe with our whole body” (p.49). Going further, Cahnmann-Taylor & Souto-Manning (2010) argue “the rational, language-based approach to most educational practices often leaves emotional and embodied ways of knowing untouched and unpracticed” (p. 63). Consequently, when engaging in Image Theatre work, warm-up exercises are needed to de-mechanize our bodies, to enhance the capacity to communicate through the body, and to counter-balance conditioned verbal responses.

According to Boal (2002), Image Theatre allows for the activation or dynamization of the image, the intelligent clay uses her body position and emotionality to imagine a character, a secret thought, fears, desires. Based on the dynamics of the characters in an image, the joker can ask them to take a step towards achieving what they want, and add voice, have a dialogue, a monologue. This additional set of movements and voice can provide a story. Booth Sweeney (2010) states that stories “allow us to imagine possibilities, and to visualize and sense connections and interdependencies that are not obvious” (p. 56). Image Theatre, then allows us to deconstruct an image, understand how this image forms a part of a larger story and peel off its many layers of complexity.

The relationship between Systems Thinking and the Social Change Model of Leadership Development

Many leadership educators agree that university students are best informed by learning a post-industrial, relational-values approach to leadership (Komives, Owen, Longerbeam, Mainella & Osteen, 2006). “This approach to leadership requires

individuals and groups to let go of traditional notions of leadership as people who act upon followers and instead calls each person in the group to action” (Komives & Wagner, 2009, p. 47). Leadership as a process is a valuable paradigm because it highlights a group process that can be learned (Love & Estanek, 2004; Kouzes & Posner, 2008) and includes all those who wish to contribute. It also assumes that positive change is at the core of the leadership process.

Komives, Wagner et al. (2009) provide a broad definition of social change in *Leadership for a Better World*, a book that explains every aspect of the Social Change Model of Leadership Development: “Social change addresses each person’s sense of responsibility to others and the realization that making things better for one pocket of society makes things better for the society as a whole” (p. 10). This understanding of social change considers the interconnections among the various pockets of society and invites students to trace such relationships.

The SCM operates under the assumption of the existence of a group that intends to engage in some form of action-change project. Like the other models, it approaches leadership from a relational and a process-based perspective; it understands leadership as a collaborative process in which hierarchies or positions are irrelevant; and assumes that all students, not only those who hold a position, have the potential to engage in the leadership process, to influence one another and to effect positive change through the change project and community engagement.

The SCM highlights the interconnections between the individual, the group and the community and espouses seven values of leadership (7C’s for change) that are necessary for change to occur. These personal, group, and community values are interconnected

through reinforcing double feedback loops. For example, the more a student develops a sense of self and commitment to a cause, the more involved she will be in an organization. This involvement and experience in turn will enhance her learning and her sense of self-understanding. The SCM's constant flow describes the developmental and dynamic nature of the process of leadership and change.

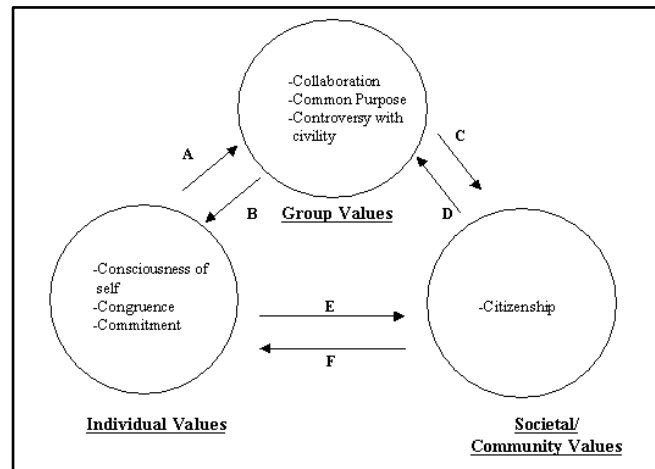


Figure 4. The Social Change Model of Leadership Development (HERI, 1996)

The seven values of the SCM are consciousness of self, commitment, congruence, collaboration, controversy with civility, common purpose, and citizenship. Each value represents both an input and an output for another sphere, representing a process in constant flow where change can occur.

Particularly related to systems thinking is the societal sphere, where the active participation in the community is intended to occur. Universities, the community at large, government agencies, and global and local organizations are interconnected in overlapping spheres, each one a network of strong cells with permeable membranes of influence among each other (Hargreaves and Fink, 2005). Since scholars suggest that systems thinking is needed more than ever because we are overwhelmed by complexity (Richmond, 2000; Booth Sweeney & Sternman, 2007; Morris & Martin, 2009), to effect change students

must understand that issues are complex and interconnected, they must learn about networked systems.

According to Workman (2009), networks can only be understood from the perspective of the whole system. There are so many interconnections that it is meaningless to isolate one part in order to understand the whole. It is necessary to move from a fragmented view of organizations to a networked or systems view of organizations. “Networks are complex, and it isn’t possible to predict specific outcomes. When a change is initiated, a string on the spider web is pulled. It is not possible to predict the unintended effects of the other areas of the web” (p. 125).

The field of student leadership development has produced a framework that allows for growth, particularly in the societal sphere, which concerns this study. The same way that the SCM highlights the interconnections among three spheres, the inclusion of Systems Thinking in the model can help surface the relationships of the many other spheres (or systems) that are interconnected to the students’ community and reality.

4. Methodology

Crystals grow, change, alter, but are not amorphous. Crystals are prisms that reflect externalities and refract within themselves creating different colours, patterns, arrays casting off in different directions. What we see depends on our angle of repose. (Richardson, 1997, p. 92).

The above quotation suggests an image of qualitative inquiry as a crystal. Indeed, this metaphor has been used by some scholars to describe qualitative research (Denzin & Lincoln, 2011; Ellingson, 2011). The metaphor also brings to light the purpose of the Image Theatre process and, from my perspective, the underlying benefits of systems thinking. The approach that I used for this study focuses on diverse ways of knowing and experiencing the world. In this chapter I describe the reason for choosing an arts-based methodology and provide detailed information about the research process.

Arts-based research

Arts-based research is a form of qualitative inquiry that unites scholarly inquiry and creative processes. It emphasizes constructivism, experiencing an environment first hand; critical interpretation, looking at phenomena from various perspectives; and contextualism, an epistemological position where knowledge depends on context (Sullivan, 2005). Researchers in various disciplines, although predominantly in education, have found in the arts (drama, clowning, film, digital arts, painting, fabric, poetry, drawing, sculpture, photography, dance, music, weaving, quilting, constructing, or any other art form) methods for their research questions. According to Thompson (2006) arts-based research “may expand the resources we draw upon in the act of making sense of events and situations, allowing us to recognize works of art in and of themselves as ways of representing understandings about human life” (p. 2).

Arts-based research is much more than choosing art as method. In order to understand its full value, it is necessary to abandon the paradigm of art as a separate outcome, a cause-an-effect intervention, or as a creative form of research dissemination. The value of arts-based research is that it opens up the possibilities of research as praxis and transformation of all involved because it encourages participants to gain insight outside of the realm of rational thought (McNiff, 2008). Arts-based research counteracts the linearity of experimental designs, it increases reflexivity and “expand the possibilities of multiple, diverse realities and understandings” (Butler-Kisber, 2007, p. 268). It enhances the understanding of the human condition through alternative processes and representational forms of inquiry (Cole & Knowles, 2008).

The traditional way of creating knowledge is based on a system that separates domains (for example, arts and science). However, when crossing the boundaries of such domains and paradigms, ideas are placed in new relationships to one another and new knowledge can occur (McNiff, 2008). The use of creative forms to acquire and to represent research data contributes to deepening meaning, expanding awareness and enlarging understanding of a research phenomenon. There are many different ways in which the world can be experienced and represented (Barone & Eisner, 1997) and creative forms of data representation allow meanings to take shape in different ways and invite everyone involved to engage with experiences in new ways. They provide opportunities to go beyond the limitations of our usual frame of reference and beliefs so that new perspectives and associations are created. Eisner (1997) suggests that in arts-based research “the material presented is more evocative than denotative, and in its evocation, it generates

insights and invites attention to complexity” (p. 8), thus, increasing the possibility of the emergence of multiple perspectives. For all these reasons, an arts-based framework provides the basis for a study that is concerned with the development of systems awareness, diverse perspectives, holistic views and interconnectedness.

Arts-based research has certain features that set it apart from other qualitative methodologies. According to Finley (2008) arts-based research uses the intellect but also the affective experiences, the senses, and the body as a way of knowing and gives interpretative license to the researcher to create meaning out of the experience.

The arts-based researcher aims to provide tools and opportunities for participants to perform inquiry through creative media and many suggest that these engagements with the arts can provoke reflective dialogue and meaningful participatory action to change society.

Furthermore, arts-based research forces the researcher to pause and look introspectively at the phenomena from a new perspective provided by the medium itself, thus increasing the potential for deeper analysis (Weber and Mitchell, 2004). This process of reflexivity is essential as Sandelowski and Barroso (2002) explain: “Reflexivity implies the ability to reflect inward toward oneself as an inquirer; outward to the cultural, historical, linguistic, political, and other forces that shape everything about inquiry; and in between researcher and participant to the social interaction they share” (p. 222).

In the following section I describe the leadership development program that I designed and implemented as the container of the study, as well as the main elements of the research process.

The Research Design

Environmental Sustainability and Leadership Development Program

Taking the Social Change Model of Leadership Development as a theoretical framework I designed and implemented a student leadership development program with a focus on environmental sustainability, which is a complex issue that appeals to many students and enables the use of systems thinking habits as a tool for leadership development. I was able to implement this program with the support of the University of Victoria Residence Life and Education Program (Appendix C), as it served as a way to pilot programming that supported learning within the residence themed communities, in this particular case the sustainability community. The program (Appendix D) was composed of various skill and knowledge development workshops and required the implementation of a change project that allowed students to work as a group and make a difference in their campus community (see table 1). The workshop that I documented and interpreted for this study was the last of six workshops I facilitated and was entitled *Understanding the Bigger Picture*. In this workshop I explored how Image Theatre illustrated the potentiality for undergraduate students to better understand the interconnections of their intersecting social systems. In the next chapter I describe the workshop in detail.

Session	Date	Purpose/ Learning Outcomes
Orientation & Recruitment	September 10, 2012	Build community, set expectations and generate commitment
Perspectives on bringing about change	September 17	As a result of this workshop students will: Have a new perspective of leadership and change/be able to articulate at least one leadership goal/start a leadership action plan
Creating positive group dynamics	September 24	Students will learn the tools to develop healthy relationships by enhancing their communication skills
Climate change presentation	October 22	Students will have an increased awareness of climate change and its

		consequences
Building coalitions on campus	October 29	Students will learn how to establish coalitions in their own campus
Effecting change on campus	November 5	Students will learn about sustainability on campus
*Understanding the bigger picture	November 24	Students will have a better understanding of the bigger picture/ realize how important that is when effecting change
Change Project Implementation	January 26, 2013	Screening of Last Call at the Oasis
Reflection and Recognition ceremony	February 2013	Students will reflect on their learning and development/ feel empowered to continue their involvement on campus

Table 1. Components and Timeline of the Environmental Sustainability and Leadership Development Program

The content of the program focused on individual, group and community-oriented topics, the Social Change Model of Leadership Development (HERI, 1996) served as the theoretical framework to develop the curriculum. In addition, I took an adult education approach in the design and implementation of the program. From this perspective, I designed an educational process that was participatory, where power was shared during the *Understanding the Bigger Picture* workshop, and where all involved in the process were conceived as active learners rather than passive recipients of knowledge. Engaging in a model of equality, participation, and dialogue allowed participants to become co-participants with me during the duration of the workshop.

The Invitation to Participate

Through the Residence Community Leaders, student-staff whose job is to build community within residence, I was able to reach students in the sustainability themed community and invite them to participate in the sustainability leadership program and in the research study. I prepared a letter of invitation (Appendix E) that was distributed at a

residence floor meeting: the letter included the consent form where I explained in detail the purpose of the research study, potential risks and their rights to withdraw from the research. Before the Understanding the Bigger Picture workshop I reviewed all this information with participants and collected the consent and image release forms (Appendix F and G).

Six students responded to the invitation to participate: five first year female students between the ages of 19-21 and one male participant, a mature student in his thirties who was in his first year of a second entry program. Among the female students was an international student; all other participants were Canadian. Five of the participants lived in the sustainability themed community, a residence community designed to engage students in their development by exploring sustainable living as individuals and in the society, the other one lived in a different residence building. Rachel, Susan, Lisa, Adele, and Michael (pseudonyms) attended all workshops in a regular basis, showed commitment, and a keen interest in sustainability.

Although I did not ask for any demographic information I had an opportunity to get to know the participants through our work together. All six students showed commitment: they attended most of the workshops and all of them participated in the data collection process. I met them during the second week of classes and noticed that most of them were already exploring extra-curricular activities and engaging in life outside of the classroom. All participants shared a keen interest in the environment and none of them had engaged in theatre-based learning.

Data Collection

During the *Understanding the Bigger Picture* workshop I collected data through different media. I captured the workshop process through video recording and photographs and also invited Avril Orloff, a Vancouver-based graphic recorder who had trained with David Diamond, to render the process into a visual interpretation. Through research notes I documented my observations and experiences during the program implementation, including my experience in the research study. This gave an opportunity to reflect on my role, interactions with participants, thoughts, feelings, attitudes, and behaviours. It was essential that my methods reflected my research question and my epistemological paradigm. Going back to the crystal metaphor and the idea of looking at different patterns, colours, and arrays and trying to be consistent with my systems thinking approach, I decided to embrace different forms of representation of my data and to make the most out of the creative process of the arts-based research design. Image Theatre, graphic recording, and stream of consciousness writing/collaborative poetry allowed me to illustrate participant's experiences and to capture emotions, imagination, intellect, and body movement.

Image Theatre

Image Theatre provides information beyond words, and it is a powerful tool for reflection. Many have recognized its potential for understanding and analyzing complex situations (Branagan, 2005; Diamond, 2007; Nisker, 2010; Etmanski, 2007). I chose Image Theatre as a method of data collection for its potential to provide a richer picture of the participants' impressions of their systems, a picture that would be far more difficult to obtain through verbal accounts or other, more traditional research methods.

Based on the model that I described in chapter two and on Diamond's (2007)

Theatre for Living, Image Theatre served both as a pedagogy and research method. Table 2 (below) describes the questions that I used to joke and debrief the process during the workshop.

Invitation from the joker to the Intelligent Clay	Debriefing Framework
<p>Internal monologue- everyone at the same time –think about your character's assumptions, beliefs and values.</p> <p>What are your desires? "I want..."</p> <p>What are you afraid of?</p> <p>Have you been this person?</p> <p>Wide shot: are there other people you think should be in the image? Invitation to come and be them + internal monologue</p> <p>Secret thought of other scales/ focus on others</p>	<p><u>What? (descriptive)</u> What do you see, feel, think? who are these characters? What is the relationship among these characters? What patterns can occur? How are they related to other characters? What's happening around? What's happening on top? Are there other more powerful dynamics? What do you think is happening underneath? Why do you think this is happening? Six reasons behind a character's motivation</p> <p><u>Yes, and: (symbolic)</u> What assumptions, beliefs and values do you hold about the image? How is this image related to you? How is the connection between your experience and understanding the bigger picture?</p> <p><u>Now what?</u> Any 'aha' moments? What changed? Transformation? Actions? What are you going to do, think differently as a result?</p>

Table 2. Image Theatre Framework

The table represents how I implemented Image Theatre both as a research method and a pedagogy during the workshop. As I mentioned in chapter one, the role of the joker is to facilitate the birth of ideas, in this sense, joking (outlined in the left column) is similar to research: its purpose is to inquire, to gather data, to identify patterns. On the other hand, the pedagogy is reflected in the learning process that occurs when debriefing an image and engaging the group in dialogue and reflection. The debriefing framework, in the right

column, is influenced by the What-So What?-Now What? Model, three questions commonly used to reflect on experiential learning. In short, I implemented Image Theatre both a research method and a pedagogy through joking and debriefing, two distinct but bounded processes.

Graphic Recording

Also known as graphic listening or reflective graphics, graphic recording involves capturing people's ideas through word, images, drawings and colour on a large and visible piece of paper as they are being spoken. According to Kelly (2005, p. 7), graphic recording allows participants to:

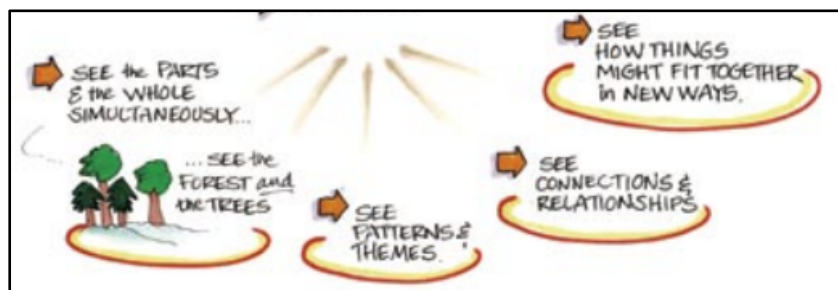


Figure 5. Practical perspectives of graphic recording (excerpt)

Graphic recording enables people to see their contribution to the whole and allows to weave together diverse perspectives into a composite "picture" that reflects the collective intelligence in the room. Tyler et al. (2005) suggest that a graphic record provides a space where participants feel heard, surfaces unheard voices, provides and integrative function, and supports participants who have English as a second language. Moreover individuals become engaged when they see their words, their expressions, and their images virtually represented on the graphic.

During the workshop and particularly during the image creation and animation, Avril drew images of the intelligent clay, the dialogue, and the highlights of the process.

She also supported me as a co-facilitator, inviting participants to look at the graphic recording and engage in dialogue and reflection.

Stream of consciousness/collective poetry

According to Richardson & St. Pierre (2005) "...writing is thinking, writing is analysis, writing is indeed a seductive and tangled method of discovery" (p. 967). This method of data collection included three phases: First, based on a metaphor, students engaged in stream of consciousness, a form of capturing an interior monologue. They write without taking the pen off the paper for a limited amount of time, they are encouraged to write everything that comes to their mind. Second, they chose a couple of sentences that really resonate with them. Finally, as a group, they put together those sentences in an attempt to create a found poem.

The crystal serves as a metaphor and a rationale for collecting data using various methods. Video recording, photographs, research notes, Image Theatre, graphic recording, and collective poetry allowed me to focus on the embodied knowledge represented during the workshop, rather than formal reflective questions at the end. This choice allowed me to engage in an arts-based analysis where I could explore the data from multiple angles.

Data Analysis

I took an inductive approach to analyzing the data (Thomas, 2003), allowing the research findings to emerge from the themes and patterns inherent in the raw data. Although I invited participants to be co-participants and contribute to the research process with me during the workshop, I analyzed and interpreted all the data. I immersed myself in the data by watching the video recording of the moments that struck me several times. I chose to examine concrete activities during the workshop with the purpose of identifying

key moments and understanding their meaning, relationships, and patterns. I made sense of the data using the crystal metaphor as my framework, having a multi-perspective analysis that allowed me to seek all possible meanings, to vary the frames of reference, to use divergent views that allowed me to analyze the data from various angles and arrays.

At first I immersed myself in the photos from the Image Theatre process and the graphic recording, then in the video, participants' writings, and my research notes. I focused on one image at a time and performed multiple reviews of the video to get a feel of the participants' emotions, behaviours, body postures, and ideas. This cyclical re-visioning process allowed me to make meaning of the data from different angles. For example, at the very beginning of the analysis, my analysis was very critical and, at times, negative. For example, at first my analysis focused on assessing the use of body to represent the images, however, after transcribing and reviewing the images and the video I was able to see the process in a different light that allowed me to move to a different stage of analysis. For instance, participants were not professional actors, and given the time limitations they did their best engaging in a new artistic and educational experience.

I compared the workshops' key moments, looked at the emerging patterns, and themes, and related them to existing theory. Due to scope considerations I choose to focus a deeper analysis on the moments that resonated more strongly with me as a researcher and facilitator.

One of the key pieces of data I collected was the graphic recording. The recording allowed me to compare and contrast the data (particularly the images and the words). It also allowed me to understand the bigger picture of my own study in a tangible and

concise manner. Avril was a co-researcher with me during the workshop and both the process and her interpretation of the events revealed themselves in the recording she did.

Trustworthiness

There are some researchers who think that the traditional measures of reliability or trustworthiness are not applicable at all in qualitative research (Pulkkinen, 2003). Yet, as I mentioned in chapter one when describing my stance as researcher, more standardized forms of empirical research set the standard and qualitative and quantitative research tend to be evaluated using the same or similar criteria. I believe it is essential to engage in this conversation, particularly when pursuing arts-based research. It is a priority for my study to be credible and valid, and for this reason I followed Johnson's (1997) strategies to promote trustworthiness.

As I described in the data analysis section, I looked at my data through a "crystal", which allowed me to explore various perspectives and that serves as a metaphor for other forms of trustworthiness. As Richardson (1997) states, "...the central imaginary for "validity" for postmodernist texts [including arts-based research] is not the triangle—a rigid, fixed, two-dimensional object. Rather the central imaginary is the crystal, which combines symmetry and substance with and infinite variety of shapes, substances, transmutations, multi-dimensionality, and angles of approach" (p. 92). The crystal as metaphor provides a deepened and complex understanding and allows to uncover many hidden layers to be uncovered in the research design.

I also used as many quotations as possible to describe participants' experiences. I used various data sources to understand the phenomenon. As well, the graphic recorder helped me to stay true to the process because her interpretation was part of the data. Avril

and I shared a process of co-inquiry during the workshop because it was her understanding and interpretation of the events what was captured on the chart. For this reason, her participation increased the trustworthiness of the study. Finally, I engaged in a process of reflexivity, particularly when I analyzed the process as a facilitator and identified my biases and predispositions within the context of this study.

Ethical Considerations

I focused on building strong and trusting relationships with participants as a foundation for an ethical research practice (Ball, 2005) and I ensured transparency with both participants and staff at the Residence Office throughout the process. It was essential to maintain confidentiality during the workshop and throughout the study so as part of the program I invited participants to create group agreements, a list of the group's expected behaviours and attitudes during the learning process. The list included *maintaining confidentiality* and I also explained the importance of confidentiality during the research study.

I made sure participants knew about the potential risks of engaging in an unpredictable and embodied process such as Image Theatre. I had some concerns around the image sculpting process. For example, participants might have been feeling uncomfortable at the idea of touching each other or experiencing physical discomfort while staying still in a pose. I prevented those risks by allowing participants to choose between two ways of sculpting the "intelligent clay", through direct and indirect touch. Throughout the process I invited participants to rest and to move their bodies to avoid any muscular strain. The use of participant's images was another concern. Students knew that

their photographs would be visible and that there was a limited anonymity, still I decided to use pseudonyms to protect their names.

I received ethical approval from the University of Victoria after describing possible risks to participants, compensation, how to ensure anonymity, and use and disposal of data. Appendix H includes a copy of the research ethics certificate issued for this study.

5. Looking through the Crystal: Examining Different Perspectives

“The properties of the crystal-as-metaphor help writers and readers alike see the interweaving of processes in the research: discovery, seeing, telling, storying, re-presentation.” (Guba & Lincoln, 2005, p. 208). This chapter examines the *Understanding the Bigger Picture* workshop process from different perspectives. In the first section I briefly describe the workshop. Then, I provide a personal account and reflection of the process of creating and facilitating the workshop. In the final section, I describe the process step-by-step from the participant’s perspective and include the impact that the graphic recording had on the workshop.

Understanding the Bigger Picture: The workshop

On Saturday November 24, 2012 Rachel, Susan, Lisa, Adele, Gina, and Michael (pseudonyms), students living in residence at the University of Victoria, got together to participate in a four-hour workshop to explore how Image Theatre facilitates the understanding of the bigger picture in any given situation.

The workshop agenda (Appendix I) was composed of seven modules, each with a particular intention:

1. Welcoming, grounding, and research intention. *“We feel comfortable, safe, excited and happy to be together”*
2. Catalyst. *“We care about an issue and feel the need for change”*
3. Warm-up & de-mechanization games. *“We dive into the world of theatre, creativity and expression”*
4. Creating images. *“Participants create images that represent what is behind their change project*
Lunch. *“We develop a sense of community, synergy, and purpose”*
5. Dynamizing/animating images. *“We uncover the hidden threads that connect us all”*
6. Reflection process. *“We reflect on our learning and insights”*
7. Closure. *“We leave feeling fulfilled and empowered”*

The workshop took into account two angles. From the educational perspective it had a particular learning outcome: As a result of our time together we will have a better understanding of how our lives and social systems are interconnected. We will realize how important that awareness is when working towards effecting change. However, from a research perspective the approach was different: Investigate in what ways the implementation of Image Theatre, illustrate the potentiality for undergraduate students to better understand the interconnections of their intersecting social systems.

The workshop was a participatory-based group process where participants were invited to take the role of co-researchers during this time and explore with me how Image Theatre could help us understand the bigger picture. Figure 6 represents the workshop's intention. I shared this image with students before we started the workshop as an invitation to explore the research question.

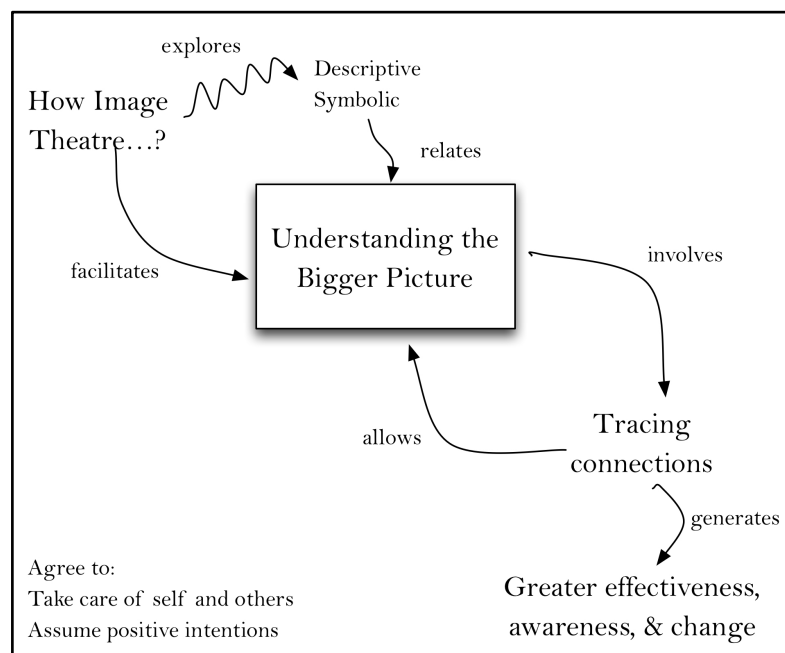


Figure 6. Understanding the bigger picture. Workshop intention

On the right side of the diagram a reinforcing loop is shown: understanding the bigger picture involves the ability to trace connections, which in turn allows us to better understand the bigger picture. This cycle conduces to increased awareness and effectiveness when working towards change, that is the reason why it is of value.

The top right side of the diagram represents the research question and how Image Theatre will be explored. Metaphorically speaking, the analysis of images is like putting on different hats, they are explored from both a descriptive and a symbolic lens, and it is through the symbolism that the group trace connections to the central theme.

Personal reflection

Critical reflection is at the core of any learning experience and transformation. When I started my research, my sole interest lay in the potential of theatre as pedagogy and on advocating for more theatre-based learning in the student leadership profession, but through the process I realized there was another area I needed to investigate: my role as a facilitator. In this section I reflect on my role as a facilitator/joker of the *Understanding the bigger picture* workshop (or research workshop), I describe the process of designing the workshop agenda, including activities that I did not facilitate. I expect that this reflection will provide insight to other facilitators and educators.

Usually when I design curriculum, I visualize the experience. It is easy for me to imagine how activities flow and to determine the learning outcomes and objectives. When I started the design of the research workshop I knew I had to facilitate warm-up/de-mechanization activities to prepare the body and build trust; to engage participants in pair-sculpting, to prepare for a deeper Image Theatre process; facilitate the core image making and dynamization or animation of the image; and to end with a reflection. In the next

section, drawing on my research journal and documents created for the workshop, I re-create the internal and external factors that shaped my decisions during the designing phase. In a sense, I am bringing a systems thinking lens to the pedagogical work of facilitation, although my reflections were not always representative of understanding the bigger picture. These reflections may be informative to adult educators and researchers alike, but at the same time illustrates the challenges of using systems thinking approaches, and the potential conflicts that emerge when personal practice, beliefs and understandings about pedagogy may come into conflict with the processes of research, research design, and the pragmatics of emergent contexts.

The workshop development process revisited

I felt very excited about the different warm-up games that I could facilitate. I really enjoy facilitating group games, because that is how I started my leadership journey when I was an undergraduate student staff and organized team-building activities for my peers. I had initially brainstormed a variety of warm-up exercises suggested by Diamond (2007) and Boal (2002): sound circle, to make music as a group; small group name games; blind cars to build synergy; push-pull as the basis of the work; Colombian hypnosis to get participants moving; speed gestures to prepare for theatrical work; and magic clay to prepare for image making; among other activities. I describe these activities in more detail on Appendix K.

Unfortunately, time was a big limitation and I decided to cut a list of warm-up games and other creativity, de-mechanizing, and improvisational activities to only one. My rationale was that the participants knew each other and some trust was already developed. I

also thought that jumping into the pair sculpting would allow participants to get ready for the theatrical work.

Boal (2002) says that there is a unity of the physical and psychic apparatuses, and that in order for the body to send out and receive messages, it has to be reharmonised or de-mechanized. That is the reason behind the warm up exercises. I believe that my decision to cut short the warm-up exercises influenced the quality of the image making process.

On the first version of the workshop agenda I had decided to create group guidelines through images. In my workshops I usually allot time to create group agreements as a way to create a safe and respectful environment and I thought (and still do) that it would be good idea create group agreements through theatre:

[Facilitator's voice]

We are going to engage in a lot of creative work and it is essential that we feel safe and respected during our interactions with each other. Think about what your expectations are for our time together, what do you expect from each other? Respect? Support? Think about the shape you could do with your body to represent those expectations. Whenever you can see clearly that image in your mind, raise your hand. Don't change your image, commit to it Let's see one image, anyone? Let's invite another shape that adds meaning to the existing one...

Again, time was a limitation and there was potential redundancy because the group had already created group agreements in the first workshop of the sustainability leadership program. Moreover, Diamond intentionally moves away from group guidelines because he thinks they "criminalizes" the group:

"I don't put a sheet up at the beginning of the workshop with rules or guidelines about how we are going to respect each other, because I think it "criminalizes" the group....says to them...you don't know how to behave so...we are going to set

some rules. I have found it disrespectful as a participant and so don't do it as a facilitator. I think that action presupposes bad behaviour and also (possibly) limits both the dialogue and the creativity in the room. I DO talk about confidentiality. It is impossible to suggest that people are going to leave here and NOT talk about what is happening in the workshop. This is both naive and unhealthy. BUT we can agree (enter a verbal contract) to not name names.”
(Diamond, 2013, personal communication).

Based on these reasons, I decided not to do this activity and instead asked participants to take care of themselves, each other, and to assume positive intentions, which was a good decision considering the time and the group's needs.

Originally I had planned a scenario as a way to kick off the image theatre process:

[Facilitator's voice]

Imagine that you got some funding from the Residence Office to create a flyer. Now the only condition is that the information has to be graphic. You have three pages. So create three images that represent the change that you want to see happening in your building as a result of implementing your project.

I liked this idea because it could have grounded the workshop's work, making it exciting and purposeful. I imagined the activity would invite students to think about a current problem, the ideal image, and the transition or change needed. I let go of this idea after reflecting on my role as researcher and my need to invite participants to become co-researchers with me during the workshop and explore, through Image Theatre, the bigger picture.

Introducing a catalyst, which ended up being the trailer of the documentary *Last Call at the Oasis* (2011), which raises awareness about why the water crisis will be a central issue facing the world this century, was a good choice. The purpose of a catalyst is

to lure, to prepare for the work, to grab participants' attention (Clark, Dobson, Goode, & Neelands, 1997). It can be anything: a photograph, a song, a video, an object, a poem, anything! I initially thought about reading *Who Speaks for Wolf*, only to realize that it would take a long time and unless I had the time to debrief and to trace the relationships, the story would be left hanging in the air. I finally decided to show the trailer of the documentary because participants will screen the documentary as part of their change project. I believe this was a good decision because it was true to them, it was short, and carried with it an emotionality that was useful to start the work.

My invitation to create a shape in the pair sculpting that followed the catalyst could have been enhanced by asking something specific, for example, "create a shape of your strongest emotion in response to the video" or "create a sculpture that shows your role in making change", rather than just saying "create a shape, any shape". I initially decided to leave it open to allow the group unconsciousness to arise, and perhaps it did, because the images initially represented groups or social systems, like government, rather than specific characters. In the next section I describe in detail these representations.

After inviting participants to do pair-sculpting and debriefing those images, I had designed the creation of group images as follows:

[Facilitator's voice]

Each of you will create an image that represents the problem that you would like to change in your residence building. You will do this in absolute silence. Each image must contain a minimum of two characters. Then we will look at the images and we will vote for one that we will animate. You will vote for the image that affects you the deepest, that has the strongest connection to your life. This means that one of the images of the group is going to get activated and the others will not. Please don't take this personally.

Although that is what I had in mind, I was certain that things would go in a different way. And they did. After animating the second group image that resulted from

placing statues in a way that told a story about understanding the bigger picture a key moment in the workshop emerged. Participants felt strongly connected to one of the images that represented a person in the “middle”, caught between scales of power and struggling with the values and the tensions of this role. In the next section I describe how this key moment fits with Oshry’s (1995) theory of systems in organizations.

After noticing participants’ resonance with the image in the middle, I asked the group to create a different group image:

[Facilitator’s voice]

The invitation is to create an image that represents the complexity of the middle character, but don’t go far away to the corporate world. Tell a story that is real to you, somehow.

I believe that moving the workshop in that direction was a good decision, however, just asking the group to come up with an image prevented the opportunity for everyone to shape an image and for the group to vote for resonance, for the image that they related to the most.

Finally, I decided to facilitate an activity that I learned from the Power of Hope (2010), an organization that delivers arts-based experiential learning programs in Canada and the United States.

[Facilitator’s voice]

I invite each of you to come up with a metaphor that describes what working towards change on campus represents. For example, "a feather in a windstorm"; "domino effect"; "planting seeds"; or "turning the soil". I will write the metaphors on a flip chart and read them out to the group looking for common themes or patterns....

Now you will choose one metaphor that you’ll like to work with. This metaphor will be the kick-off phrase for doing stream of consciousness timed writing. When writing use descriptive and metaphoric language; use your pen as if it’s a paintbrush. Play with language and the sounds of words. Always keep the pen moving. If you get stuck, write whatever comes to mind: "I don't know what else to say." This will move you right into the next thought.

You will write until I call "stop", for five or seven minutes, without taking their pen off the page...

Now read your writing in silence and circle two or three phrases that you particularly like. You will gather the individual phrases together to make a group poem. It's ok to use short connective words such as "and." A helpful hint is to choose a first line and a last and then fill in between.

My rationale behind this decision was to find the meanings in the narratives of students, rather than simply asking them to write how they thought Image Theatre helped us explore the bigger picture. As a researcher, I could have gotten more specific data, but it also could have resulted in “pleasing the instructor” behaviour and I wanted to move away from that. I believe that the poem was a good way to reach closure and to achieve something tangible as a group and aligned with the arts-based philosophy that I chose to implement.

The activities I described previously worked well, as I mentioned there were moments where I could have made different choices. But in general it seemed that the learning outcome was reached: for participants to have a better understanding of how our lives and social systems are interconnected and to realize this when working towards effecting change.

The challenging role of the joker

“Take a partner. Stand facing each other and place your hands on each other shoulders, and push. Really push. Use your muscles. One of you is going to be stronger than the other. That’s life. The person who is less strong, push harder. The person who is stronger push less hard. Don’t try to push each other over. This isn’t about winning or losing. The idea is to find the balance of strength between the two of you. Have the conversation with your bodies...And again. And again.” (Diamond, 2007, p. 88)

In chapter one I described my stance as educator, researcher, and artist. I briefly described the role of the joker; however, it is essential to describe the challenges that

emerged from stepping into those different –and at times contrasting roles, particularly the overlapping roles of researcher, educator, and joker. What might appear as a subtle facilitation process was in reality a mix of emotions and contradictions.

I encountered the first contradiction in the planning process: As an educator/facilitator I operate from an outcomes-based approach where I design the curriculum based on the learning outcomes that I foresee students will have as a result of the intervention. However, as a researcher, I could not dictate any outcomes or force participants to follow a specific path because during the workshop I saw them as co-researchers and thus, allowed them to make process related decisions.

Another contradiction emerged from negotiating the role of joker and researcher. Even though the joker is in a sense a researcher that asks questions, the joker's role is –as I mentioned before- to be a *difficultator* (Boal, 1995, cited in Prendergast & Saxton, 2009) to operate in the realm of theatre, of the aesthetics. The goal of the *difficultator* is to challenge ideas and to name issues, to push towards disequilibrium, discomfort, and dissonance. Diamond (2007), citing Capra, states “a machine can be controlled; a living system, according to the systemic understanding of life, can only be disturbed” (p. 172). Because it is in disequilibrium that transformation occurs and it is the role of the joker to provide that space for disturbance, in the hopes that the group or community as a living system, will get back into equilibrium.

Although I had formal training in Theatre of the Oppressed in 2005 and Theatre for Living in 2012, and have since implemented Image Theatre and Forum Theatre in student leadership workshops, I also wondered how my facilitation style impacted the process. Saxton and Pendergrast (2009) state that the applied theatre facilitator must know about

theatre, teaching and learning and describe how many processes are hindered by the insufficient knowledge and experience facilitating, result in experiences of little impact. They quote from Sullivan (2004): “Effective [facilitators] must combine the skill of dramaturg, director, improvisational actor, drama therapist, political philosopher, rhetorician, talk show host, and stand up comic” (p. 17). And yet, as a researcher and as an educator I had ethical responsibilities towards the participants and had to ensure their safety and comfort, therefore, the work stayed on the edges of the disequilibrium, providing great insight but short of the potential for a deeper transformation.

It was not easy to facilitate Image Theatre, not only because of the overlapping roles and contrasting demands, but also because the joker requires to step into the realm of both theatre and education. It is a key role that requires ‘push and pull’, and balance. The role of the joker is an enabler of complexity and, thus, of systems thinking.

Participants’ Process

In this section, I present an overview of the *Understanding the Bigger Picture Workshop* and recount the happenings that occurred from the participant’s perspective. I also present some of participants’ words and writings.

[Facilitator’s voice]

“Stand facing your partner and decide who will be the sculptor and who will be the intelligent clay. The sculptor will create a shape in complete silence”. The intelligent clay will stay still and will fill the shape with thought and emotion indicated by the body position. Create one image, then destroy it and do a second one”.



Figure 7. Workshop participants and facilitator

The six participants took turns to engage in the Image Theatre process. In the first round sculptors created images that expressed meaning mostly through arm gestures: one image featured the intelligent clay with both hands up, a second had one arm to the front and the other one to the back, and the third presented the intelligent clay covering her eyes with one hand while raising her other arm with the fist closed. In Figure 7, from left to right, we see Michael, Rachel, Susan, Lisa, and Adele moments after the sculpting time was over. I did not prompt the themes of these sculptures, however some participants mentioned that the documentary's trailer influenced them.

According to Diamond (2007) the process of pair-sculpting and placing images as a collective can help the group demystify the process of making theatre. In this particular case, all participants had a previous experience engaging in theatre-based learning in earlier workshops of the leadership program, so it was not a challenge to engage them in Image Theatre because they already knew what to expect. Diamond also states that

through the Image Theatre process it is possible to access the larger consciousness and unconsciousness of the group. As a facilitator I know that those who speak first or speak the loudest can influence everyone's ideas and I tried hard to elicit different perspectives and to hear from all participants. Interestingly, I noticed that among the participants there was a very similar thought pattern and image making throughout the workshop. For example, activism was present in all the images that participants created and those images seemed to represent direct action. In the next chapter I describe in detail the key themes and moments that emerged in the workshop.

[Facilitator's voice]

Place images as if we were in an art gallery, place them in relation to one another so that they tell a story.



Figure 8. Activists-Corporations-Government

The documentary's trailer shows many images of activists, protestors, and fighters, and discusses industrial chemicals in the water and the need for change. There is no specific conversation about the role of government or corporations. Nevertheless, as we will see, participants identified these social systems in the first image.

Once Michael, Susan and Adele were in their place (Figure 8) I asked, *Who do we think these characters are?*

Participant: *Michael is like the people, the resistors, or maybe activists. Maybe Susan and Adele represent people who are making decisions.*

I asked why Michael was an activist and the response was *"he is resisting the decisions the leaders are making"* Then I asked what sort of decisions the activists were resisting and the response was *"blind decisions"* I inquired about Susan, the character in the middle:

Participants: *"Susan is trying to placate him, say don't worry it's all going to be ok. Or maybe making promises".*

Facilitator: *Is that sincere?*

Participant: *"Maybe not because one of her hands is behind. So maybe she is doing something behind her back..."*

Participant: *"Susan is like the business and she wants to get through. And there... the government, they are trying to be blind... and not be fully sided with the business but she is not really stopping it either. So she is just letting them go".*

The image in the middle allowed for some analysis on perspective. Some thought this character did not mean well, but Susan as intelligent clay, added good intentions to her character. This moment showed the dissonance between the actions of a character/image and the true intentions.

Susan: *"L made me smiling so I feel that I'm happy with whatever I'm doing. I don't feel as though I'm angry. I feel like I'm welcoming him"*

Facilitator: *What is the character saying?*

Susan: *Hey. I'd love to help you.*

This paradox challenged the normative perception of the relationship between activists and corporations, allowing space to surface participants' mental models. Another paradox emerged when Michael, the activist, expressed his secret thought: *“Back off but approach me. I'm accessible at the same time”*, perhaps describing the complex feelings of activists.

Time limitations did not allow us to explore the underlying needs and intentions of these characters. However, the moment carried content and meaning that allows students to surface and test assumptions if analyzed from a systems thinking perspective.

[Facilitator's voice, second round]

“Stand facing your partner and decide who will be the sculptor and who will be the intelligent clay. The sculptor will create a shape in complete silence”. The intelligent clay will stay still and will fill the shape with thought and emotion indicated by the body position.” Create one image, then destroy it and do a second one.

Similar to the image making process in the first round, sculptors created sculptures that mostly used the arms to express meaning. According to Boal (2002) “a bodily movement ‘is’ a thought and a thought expresses itself in corporeal form” (p. 49). There is learning potential in inviting participants to reflect on their image making process and allow them to surface hidden meanings, emotions, and thoughts.

[Facilitator's voice]

Place images as if we were in an art gallery, place them in relation to one another so that they tell a story about understanding the bigger picture.



Figure 9. Rejecting the status quo

The characters participants identified were similar to those in the first image. Also the conceptualization of activism was similar. Someone defined Rachel as “*the aggressor, the one rejecting the status quo in a violent stance*”. Some one else described the image as follows:

I see it as two extremes and Lisa is like in the middle. For example people who chain themselves to trees are extremists in the fight for what they want. Gina can be like the company who is like: I need to meet my bottom line... and then Lisa is like in the middle, she understands the company but she is not a crazy activist, but she is still strong in what she wants to do.

I invited participants to describe how the image told a story about understanding the bigger picture; they chose to focus on the challenges of making change:

Participant: “*A lot about the bigger picture is making change and all the things that come in the way*”.

Participant: *“Either someone helping them [change makers] or someone shutting them down”.*

It seemed that participants’ understanding of the bigger picture related to identifying the tensions of someone dealing with change or conflict. After talking about change, which was conceived from an individual’s perspective, I invited participants to look beyond the image, to think about the hidden characters or systems that influenced the original image, then requested participants to join the image and to pose as those characters. Susan added herself pointing a gun to Gina, the character in the middle, and the image instantly became more complex:



Figure 10. Hidden systems

The new character wanted to express all the different pressures of Gina's character:

Her business might be funded by corporations that keep her job and she might have a family and other things in her life that make her really invested in the company.

An interesting conversation emerged when analyzing that new image. Gina, initially expressed that she did not want to be responsible or held accountable, but now she was fearful and angry at the activist because she felt that Rachel was putting her in that difficult position. Participants also talked about the interconnections between Susan and Gina's characters. Susan, the character with the gun, brought up the Enbridge Northern Gateway Pipeline Project, a current example in the province of British Columbia:

A lot of businessmen represent wanting that [the pipeline] for a lot of individual reasons and I'm all of their individual reasons holding it against that one small company. I feel like I'm all those people saying, Gina, 'if you don't' lots of consequences will happen.

I invited the original characters back to the image and asked if anything had changed. It seemed to some that in the new image (Figure 11, below) everyone was against Rachel's character. To others, Lisa's character was making change through a different approach:

She [Lisa] is more like the political...she is more like let's go get parliament rallied up and Rachel is more like let's do singular acts of tying herself to trees and standing in front of X, I feel like there are different types of activism.

I asked participants *who do you guys relate to in this image?* To my surprise all students identified with the character in the middle:

Everyone has been in a situation where they want to do change but they understand why they can't because of other factors" She [Gina, in the middle] wants to agree but can't. Gina is caught between the two sides...



Figure 11. Hidden systems (opposite)

In the next chapter, I explore in depth these moments where participants expressed their views of activism and their relationship to the character in the middle. This seemed to be the climax of the workshop; many interesting descriptions based on participants' perspectives and assumptions and the identification of a character that is known in systems thinking and organizational change literature because of its key position to make change.

[Facilitator's voice]

Create an image that represents the complexity of that middle character. Tell a story that is real to you



Figure 12. The story of the 'middle'

Participants created three images that represented the passing of time, the far right with Michael and Lisa representing the past and the experiences that shaped the character, and the far left with, Susan and Rachel, representing the future. In the centre we see Gina and Adele as activists. The full image represents where that character in the middle (Figure 10) comes from.

From my perspective the process of creating this image was dictated by one of the participants who volunteered her life story as an example that could be used. Participants agreed to create an image based on that story and after the lunch break when the image was animated the conversation initially focused on opposing family values and expectations. After this conversation I asked how all those things related to understanding the bigger picture.

Participant: *“When you are inside a small picture it’s usually wrapped up in emotions...when somebody from the outside steps in, they can see it from a logical standpoint, they don’t get involved in the emotional part”.*

Through this analysis participants briefly discussed the role of mediators and conflict resolution, also the empowerment of having someone with similar perspectives around. The opposing family values conversation quickly evolved to exploring the actual issue, which was hunting. This conversation led participants to think about the reasons why a character (the father) had certain behaviours: “...*is about being perfect and thinking in absolutes, living up to expectations that were brainwashed into my brain.*”

I argue this was a good example of a participant’s awareness of social systems influencing people and behaviours. Moreover, the analysis that occurred at this point – particularly analyzing the father’s motivations- followed the model I described in chapter two, the iceberg that shows a visible behaviour influenced by certain mental models and assumptions about the system.

The initial hunting conversation also led to the activists in the following image to oppose hunting and to state: “*hunting as a sport perpetuates the idea nature is there to be conquered by humans. That’s the bigger picture of this image.*”

At this moment in the workshop participants were making easier connections to the overarching theme of the workshop: understanding the bigger picture. For example, they identified situations in which people disagree and discussed the ways in which conflict or disagreement could remain respectful. They described one of the values of the Social Change Model (HERI, 1996): controversy with civility. Also participants identified the challenges of making change in the system and managing individual pressing priorities and global ones. For example, when asking the characters on the far left how they were transformed as a result of having a kid, Susan, in character, said:

It made me more money conscious... it’s not me starving, it’s my child. And I think you care more about your kid that you could ever care about yourself.

You need that kid to have a good life, a house to sleep in, a nice bed, and food everyday, and it's more important than anything else for that kid to be good

In the next chapter I explore some of the contradictions and complexities that emerged from the dialogue after animating *The Story of the 'Middle'*. Although, participants were tired at the end of the workshop, the process opened the space to explore the challenges of effecting change and allowed for deeper exploration and learning.

Before animating *The Story of the 'Middle'*, I asked students to create an image to represent what they wanted to happen after they screened the *Last Call at the Oasis* documentary in residence (Figure 13). Afterward, I asked participants to vote for the image that they wanted to animate and explore, based on what they felt more connected to. They decided to animate the image representing the complexities of the 'middleperson'.



Figure 13. Change in residence

To finalize the workshop and to tie the analysis of all images to their change project I invited participants to think about metaphors that represented working towards change in their residence. They came up with very interesting metaphors:

- *A drop in the rainstorm still makes the groundwater. A small difference still does something*
- *Making a pizza or like cooking anything*
- *Uphill battle*
- *A sponge*

Participants unanimously voted for the pizza metaphor and chose it as they starting sentence for the stream of consciousness writing. I asked the group if what they feel connected to was the idea of the pizza or the idea of cooking. One student articulated it like this: *“I really like the pizza one, the whole idea that you can have different flavours on your slice... You have tomatoes, and I’m like onions”*. And another said: *“I just like the idea of pizza”*.

Although as a facilitator I did not agree with their decision I fully respected it and was curious to know what would come out of it. The final piece (Appendix J) was eclectic and as a writing piece did not achieve the cohesion and clarity that I expected. However, a few individual writings showed the complexities of working for change in a group and I was pleasantly surprised to see that a few participants recognized difference or diversity as a key ingredient of the change process:

The pieces of vegetables are all the different values and ideals that are brought together by making this pizza. Now where all these veggies come from shows their history so this can include their relationships and the opinions they were exposed to. This also includes what they themselves did like working in a workshop to better understand themselves and the issues. So now we have “veggies” with all these different stories, experiences and ideals brought together. In this instance it is sustainability. The raw dough represents the unfinished product, that it still requires more time and effort before it is completed. The cheese is respect, respect of each other’s histories and opinions that allow all of the ideas to melt into one cohesive solution.

The baking of the pizza is the discussion between all of us and allows us to come to a goal.

Everyone will be bringing different strengths and viewpoints to the table when making this and having different people there can drastically change how the product will turn out.

Participants did a good job throughout the workshop. They engaged in the conversation, created images and stepped out of their comfort zone. The workshop process along with the program allowed them to reach cohesion as a group and to plan ahead for implementing their change project.

The *Understanding the Bigger Picture* workshop was full of imagery and metaphors that provided themes and patterns to participant's ideas and explorations. The metaphors allowed participants to connect images and ideas in new ways. It moved us from one-dimensional experiences of traditional learning to having multiple layers of perspective and meaning.

6. Findings

In this chapter, I delve deeper into two of the images presented in the previous one, and derive some observations regarding the participants' conceptualizations of the systems around them, as well as thoughts about the Image Theatre process as a mechanism to uncover, develop, and refine system awareness.

I chose the images *Activists-Corporations-Government* (Figure 8) and *Hidden Systems* (Figure 10) based on what Weigler (2011) defines as *aesthetic arrest*, a moment in a performances or theatrical piece that produces in the observer a kind of epiphany, or an insight. In other words, these two images were the ones that had a strong impact on me and the participants. I chose the first image because it represented the work of the first part of the workshop which carried an understanding of systems that helped me answer my research question, and the second image because it literally made the group gasp, creating an embodied reaction, during the workshop and led me to experience once more the power of theatre.

Participants' understanding of systems

The first image in which an interesting dynamic is portrayed is *Activists-Corporations-Government*. Regardless of its aesthetic value, it is worthwhile to analyze its shapes in light of the roles that participants gave to each sculpture. Standing on the far left is the “resistor” or “activist”, with his hands raised and his palms open facing ahead. His arms are relaxed, and although we cannot see his face, he appears to mean no aggression. In fact he stands a pose widely accepted as one of surrender, although perhaps the activist is not entirely surrendering, but passively obstructing—blocking access from the others to whatever the activist holds valuable, behind him.

The second figure, facing the activist, was later identified as being “the business”, a representation of a corporation or the corporate system. The sculpture stands in an ungainly, weak posture. She does not make eye contact with the activist, but looks beneath and somewhat to her left, to a path through her obstacle. She presents a faint smile. Her left hand might indicate the way ahead, while her right hand is placed behind her back. We can see she holds nothing in her hand—the palm is open—but the activist cannot see this.

To the far right of *Activists-Corporations-Government*, stands the figure that participants later explicitly identified as the government. Strangely, the government is using her right arm to support herself against the wall, and not only faces away from the action, but uses her left hand to cover her eyes. Her posture may suggest embarrassment, impotence, or a reluctant collusion with the corporation, or other interpretations.

With these three elements alone (the resistor, the corporation, and the government), we can begin to trace the participants’ understanding of these systems. Because the theme of the program was based on environmentalism –and perhaps also due to the impact of the documentary clip used in the workshop- the role of the activist was introduced, and is the main source of tension in the picture as a whole. The resistor is in the minority, and the participants suggest a power imbalance between him and the two other figures in positions of authority. It is not clear whether participants were sympathetic to the role—they later suggested they saw his behaviours as radical—and yet the activist role remained present in every image participants worked with.

Standing against the activist is the corporation, and although physically the corporation does not seem to present a threat, it appears confident that it will get its way. The reason, according to participants, is that its agenda is backed by the government,

which is cornered and reduced to making blind decisions. There is a subtle tension between the corporation and the government: the government does not seem to be comfortable with its position in their relationship, and is cowed by the situation. The third possible source of tension in the picture, the relationship between the resistor and the government, is stymied by the central position of the corporation. The activist has no access and no connection to the government. The activist is not represented by his government, and the corporation controls the dynamic and perhaps sets the agenda.

It is also worth noting the separation between the different elements in the image; this is a visible pattern in all images. Each role stands in contrast to the others, and physically apart from them. They are simplistic representations of more ambiguous and complex concepts in real systems. There is no apparent relationship between activists and any other societal group, for instance, whereas examples of such collaboration are abundant in our society. While there is certainly a limit to how much meaning participants could convey in an image with three sculptures, it is interesting that they chose to represent these roles the way they did, and not engaging in any deeper interplay or give-and-take. It is possible that my facilitation influenced the outcome.

The relationship between the government and the corporation shows that participants grasped relationships among these systems, but they also showed a tendency to stereotype. In a way, participants were surfacing their mental models which is a good habit when trying to develop systems thinking awareness. Exploring the motivations –or reasons why society or the media characterize these groups thereby creating these ‘stereotypes’ - behind “crazy activists”, “blind government”, or “corporations making money” can bring a deal of complexity and reality to the analysis.

Participants made a connection between their role as university students and the capacity for thinking in systems: “*We are in university to try to become more open minded, to think about the bigger picture.*” They also acknowledge that systems thinking, or the ability to see the bigger picture, was essential: “*It takes more people like that (the people that are bigger than their own) to affect change in a global scale...otherwise the status quo is going to stay that way.*”

Although participants identified certain systems without a problem, they failed to verbally acknowledge other systems such as the media and the role that they play in shaping our understanding of the world –of activists, for example. However, there is a possibility that through the media participants have constructed their understandings of activism, corporations, or government. Therefore, media as a system is embedded in the group consciousness although we did not explore this idea at all.

As a researcher and facilitator I am aware of the possibility of participants trying to please the instructor by suggesting that systems thinking is essential and that Image Theatre allowed them to understand connections. However, I experienced the potential of both systems thinking and of Image Theatre as a way to learn about systems, and I observed how embodied exploration can engage participants and foster meaningful dialogue.

Systems’ Integrators

Hidden Systems represents one of the most interesting moments in the workshop. Recall that participants were asked to introduce hidden characters into the earlier structure. The role of the activist remains, now portrayed by a different participant at the far right, and in a somewhat different, more aggressive stance. The role of the corporation also

remains, now threatening the middle figure with her right hand shaped as a gun aiming at the middle figure's head.

The character in the middle of this new image also represents a corporation or a small business. The participant stands straight, in a strong posture, pointing commandingly to the activist, suggesting an order from somebody in a position of power. The order, however, does not arise simply from that agent's desires, but from the pull that the rest of the systems in which she operates have on her. The sculpture in the left, pointing with the gun, is now not only a corporation, but the collection of interests, rationales, and agendas that result in a threat to the well being or the livelihood of the participant in the middle, and which in turn results in the order that the participant in the middle gives to the activist on the right. In this way, a reinforcing loop arises: from the unrest and demands of the activist we get a series of events that make the larger corporate system threaten the well-being of the person in the middle, and from such a threat we get the person in the middle's repression of unrest, which does not resolve the underlying issues the activist cares about and leads to further unrest.

Also of interest is the perspective that the participant playing the person in the middle brought up for discussion. She claimed to feel fear and anger towards the activist: fear because she may lose her livelihood, and anger because she feels forced to act rudely and perhaps against her values. What is interesting is that she channelled her fear and anger towards the activist, the apparent symptom of her troubles, and not towards the larger system in which she operates, represented in this case by the sculpture to the left.

Oshry (1995) who has written about systems thinking and organizational change highlights the role of the *middle*, in his context referring to middle management.

According to Oshry (n.d.), we are all tops, middles, bottoms, or customers depending on the context and the position we occupy: we are top when assigned responsibility and bottoms when we experience problems that we think higher ups ought to be taking care of. “We are middle when we experience conflicting demands, priorities and pressures coming at us from two or more individuals or groups” (p. 3). Middles are seen as system integrators, they have the capacity to connect all parts and to ensure the flow of information, and thus, change within the system. However, Oshry states that when people connect with certain parts of the system while reducing the connectivity with other parts, they sabotage their capacity as systems integrators. Part of the reasons why this dynamic occurs is because the middle tends to fixate on the “I” mentality, therefore perceiving themselves as separate from the whole system.

Activism

All of the images created portrayed activists or activism. However, I observed a dissonance between the symbolism presented by the images and the description given in the exploration of it. The group had a tendency to reject what they identified as ‘extremist activism’ and yet portrayed themselves as activists with their fists in the air in every image that was created. On the basis of such descriptions, I suggest that activism as an idea was present in the group’s consciousness, but participants failed to acknowledge the essential role that activism has played in society, and fell short of representing the array of roles and activities that can be found under the activism umbrella.

Perhaps class, age, culture, and race, along with life experiences, played a key role in shaping participants’ perception of activism. They expressed their willingness to take a stand without disrespecting or hurting other people; suggested that one had to be *assertive*

but diplomatic; and expressed that *the bigger picture is about appeasing everybody*.

Although students implied that change comes from engaging change makers and policy makers, or government, it seemed that their mental models were set on a perspective that equated activism with isolated, unsuccessful, and radical actions.

However diplomacy might not necessarily trigger change: Freire (1982) stresses that transformation cannot “be reduced to either verbalism or activism” (p. 119) because then it is void of action or reflection. From this perspective, those who engage in true dialogue and critical thinking become active agents –as opposed to passive ones and, thus, become empowered to challenge inequalities and injustice. The key element in Freire’s view is the *conscientization* that is achieved through dialogue and critical thinking, he states “without dialogue there is no communication, and without communication there can be no true education” (p. 81). Participant’s suggestions for compromising or appeasing everybody had the potential to lead into a deeper and more critical conversation about dialogue and transformation.

The Social Change Model of Leadership Development (HERI, 1996) calls for students’ engagement in societal issues with the purpose of developing social responsibility. Komives et al. (2007) describe activism as being active and engaged: “Somehow, too many people have developed into observers instead of activists in their daily lives. They act as if they are spectators instead of citizens and active participants” (p. 20). The Social Change Model promotes societal change as well as individual and group development, therefore, a double feedback loop exists when students engage in activism because they develop their skills while enhancing their communities.

According to Ollis (2008; 2012), lifelong activists who have generally been involved in student politics and have engaged in activism for many years develop their skills incrementally by being engaged in a community of practice. Kovan and Dirkx (2003), who researched environmental activists, concluded that systems thinking, along with other areas, are important for activists. Whelan (2002), who analysed activists training needs, states that the pedagogy of activism is founded on adult learning principles that occur in informal education settings like social movements. These results suggest that a combination of systems thinking and other skills along with intentional involvement in a community of practice or movement have the potential to increase the skills of those engaged in social change.

Students' perceptions of activism might change with time, but perhaps this finding speaks to the potential for intentionally connecting activism, student leadership, and systems thinking and to broadening the understanding of the many different ways in which we can effect change and develop our skills.

Complexity

Complexity, understood from a systems theory framework, can refer to self-organizing, adaptive systems that are spontaneous, chaotic and do not respond to interventions in a predictable manner, like the climate or social structures. However, I specifically refer to the tensions and contradictions when enacting one way of seeing or knowing the world, while expressing another. I also refer to the awareness of the various elements within a system –our social system- that lead to tensions and confusion and prevent us from effecting change.

Such contradictions and tensions were revealed in most images. During the first part of the workshop participants' representations of activism and of being stuck in the middle, negotiating contradictory values shed light on the complexity of the roles we play. The second half of the workshop, where the participants explored complexity through *The story of the 'middle'* (Figure 12), led to the exploration of the complex nature of relationships with parents who espouse different values and the representation of life events that suggest a shift in values, political views, and the need to compromise.

The debrief led participants to talk about exceptional people who have excellent time management skills and are perfectly capable of taking on global issues, and *to put long-term priorities in front of short-term priorities*. Some participants also wondered if the determinant to effect change was the situation and not the person, or perhaps both: *If you want to make change you have to be passionate about it and you have to understand how it works*. It is clear that participants identified the complexity of leadership in practice and unknowingly described characteristics of the traits and situational leadership theories. It seemed that the Image Theatre process not only allowed them to explore issues and trace connections, but also provided an avenue to reflect upon the complexities that those engaged in leadership can face.

The Graphic Recording as a tool for developing system awareness

I followed my intuition when I decided to invite a graphic recorder to capture the Image Theatre process during the workshop. At the time of publication of this thesis I did not find other studies that explored the impact of Image Theatre or any other form of theatre-based learning and graphic recording done in parallel.

The graphic recording was the highlight of the workshop for the students and a tool that enhanced the systems thinking potential of Image Theatre. The recording allowed the group to see and reflect upon the process and the images, it opened up the possibility of pausing and reviewing if the conversation was captured accurately; creating the space for participants to see and reflect on the complete process at the end of the workshop which made this workshop unique for students.

According to Kelly (2005) graphics connect with, stimulate and support the way we are as humans. “The large size of the chart, colour, images, words, and the organization and formatting of data contribute to all this” (p. 6). The graphic recording was key at the end of the workshop when participants needed to connect the dots and bring all those abstract and complex ideas into their lives.

For example, the graphic recorder was able to capture a conversation that I missed, regarding the tension between personal, immediate concerns and global, more pressing priorities. There was a moment where Avril stepped into the role of co-facilitator and, thus, co-researcher during the workshop. She invited participants to connect the conversation about disagreement with respect with their change project.

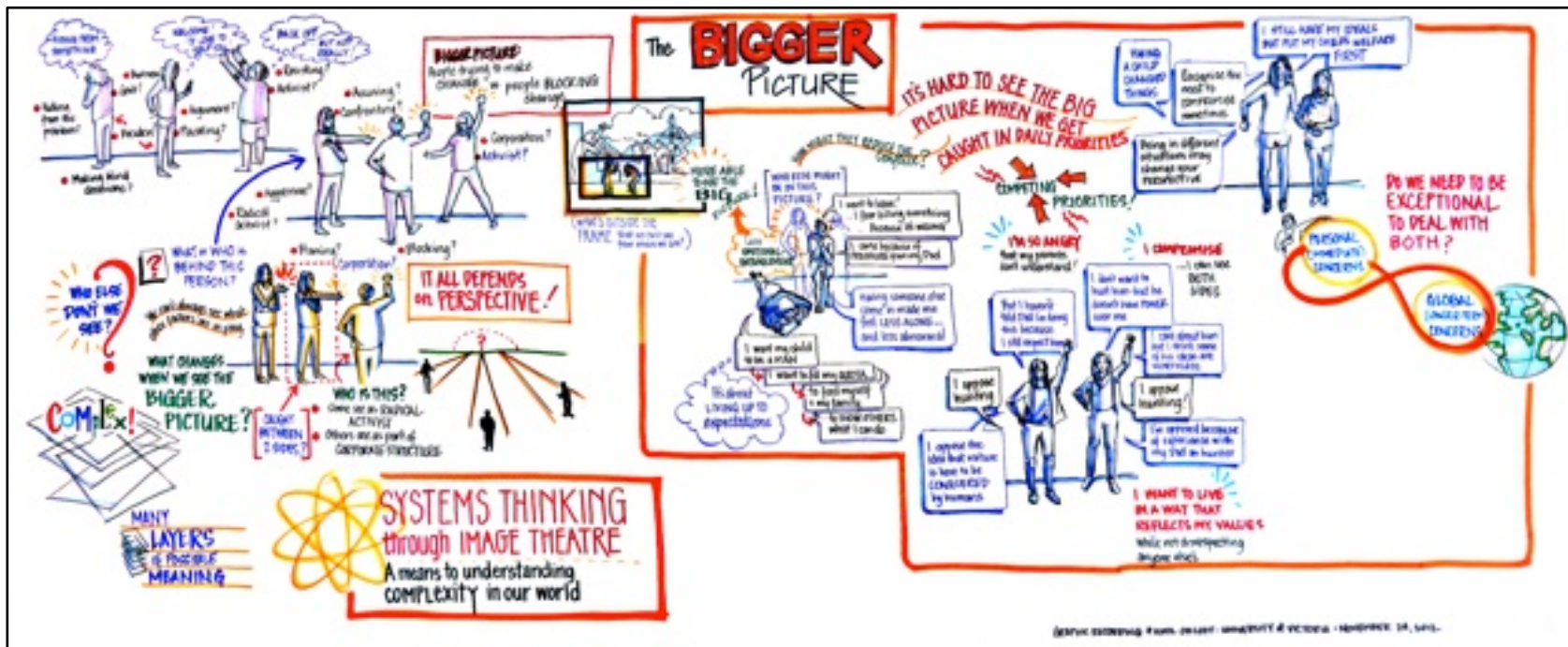


Figure 14. Graphic recording by Avril Orloff

The graphic recording was essential for the systems thinking process in the workshop. The images in the wall allowed the group to trace the connections, to see how things were affecting one another. The graphic recorder was able to capture the things that participants said and that was essential to maintain the experience truthful and to document it in a different way. It allowed students to see and to understand hidden meanings. Similar to the Image Theatre process, rather than imagining connections in our heads, we were able to see them. Students saw their own images and words on the paper and that opened the space for deeper reflection. Therefore, the recording is an important piece when attempting to understand the connections among systems.

Systems thinking suggests using diagrams and concept maps as tools for capturing the complexity of a situation. Freire (1973) proposes the use of role-plays, stories, slides, photographs, songs, or drawings as “codes” that represent the community reality back to participants for discussion. He argues that visual images can inspire a group to critically analyze many social relations and realities within their communities. Similarly, a graphic recording can reflect reality and interconnections to participants, thus, enhancing the learning and reflective process of the group.

7. Implications for Practice

The workshop helped me understand the big picture by visualizing the things we know (image theatre). Sometimes visualizing the words or the factors that we know into shape like we did in the image theatre was difficult. But this brings us to the deeper thought about the issue, sustainability. (Participant)

In this chapter I describe how Image Theatre illustrates its potential to support the understanding of systems thinking with undergraduate students involved in leadership programs. Through my experience in this research study and based on the analysis, I found that embodied learning can open up new ways of understanding, and has the potential to facilitate the process of learning systems thinking concepts and habits. Particularly, through Image Theatre participants had a unique opportunity to explore an issue from different perspectives, trace the connections among characters, play with time frames and possible consequences, and engage in an experience where they can rehearse a specific situation of being in the shoes of different characters and understand –through this embodiment- new perspectives and interconnections.

Based on my experience as a researcher and facilitator in this study I recommend various elements that student leadership educators might take into account. I focus my attention on two of those elements: first, the considerations that educators need to take when implementing a leadership program based on a systems thinking framework; and second, I make several recommendations for facilitators implementing an arts-based systems thinking approach in their leadership training. These recommendations are based on what I learned from this research study and from my experience as a practitioner in the field of student leadership, working with the Social Change Model of Leadership Development as a theoretical framework.

A systems thinking framework for implementing student leadership programs

If one of the main objectives of a student leadership development program is a commitment to develop systems thinking, the overall planning needs to be different than only adding systems thinking to the curriculum. The planning and implementation itself must take a holistic and integrated approach, incorporating systems thinking as a framework for planning and reflecting the interconnections of the elements within the program and outside of it. Figure 15 represents a first draft of a potential model, it is based on a single experience but it might provide insight to student leadership educators and set the basis for further exploration and research.

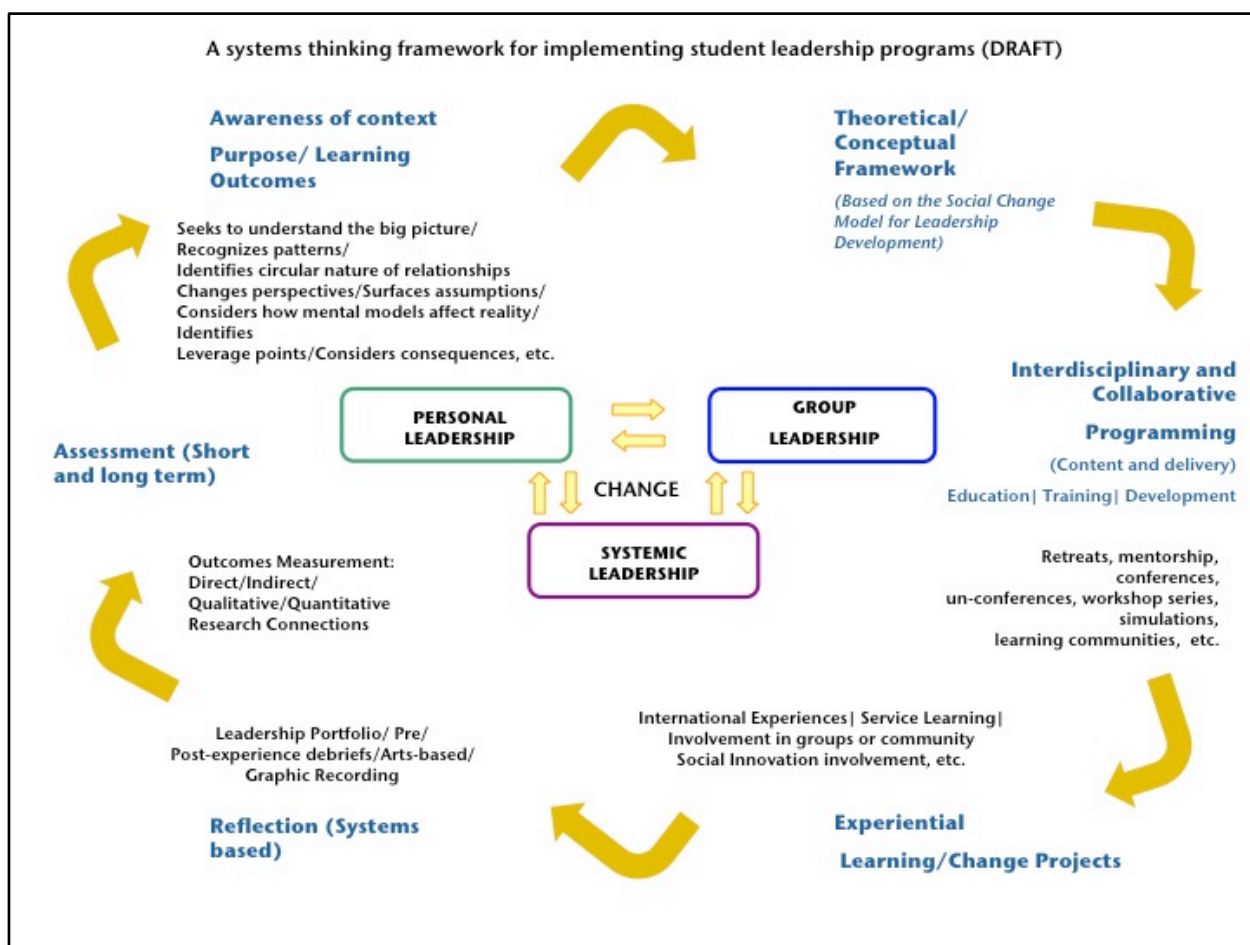


Figure 15. A systems thinking framework for student leadership programs

The main elements of the framework are shown on the outside, on the inside some practical ideas are outlined. The design process requires an awareness of context, both from a programming perspective and the students' perspective. The main purpose is to understand the bigger picture and the rationale for the program. The learning outcomes will emerge from the purpose, however for a systemic framework my suggestion is to identify core learning outcomes that are present in all aspects of the programming. Figure 15 shows an adaptation of the Social Change Model of Leadership Development as the theoretical framework; however, it is possible to infuse systems thinking in to other models. Although the programming, experiential learning, and reflection elements are shown separately, they are intricately connected and represent the essence of the framework. Finally, the assessment refers to the outcomes measurement including long-term measures, which indirectly implies a strong partnership with alumni relations or with students themselves and provides the input for a cyclical and dynamic process.

In my experience, student leadership educators and program administrators find implementing programs that integrate community projects, programming from other departments, or partnering with academic courses or projects a challenge. Therefore, a new approach and paradigm is required to implement student leadership programs that are based on a systems thinking framework.

Regardless of implementing a systems thinking framework, there are various ways in which student leadership educators can enhance their programs by integrating arts-based learning. I propose a few practical ways to get educators started: implementing arts-based learning labs, building a community, and learning more about the intersection of leadership and systems thinking.

One possibility is to implementing arts-based learning laboratories where educators/facilitators have a space to practice and receive feedback from both students and other educators and where the use of graphic recording in parallel to an arts-based process could be explored. These labs could foster an open and transparent dialogue with participants of the process as a way to assess the impact and the quality of the activities. Trying out new learning approaches have the potential to enhance the learning environment and to provide new perspectives and opportunities for all involved.

It is important to assess the interest of other leadership educators or allies to implement art-based learning and form a group where resources, best practices, and insights are shared. This group can serve as an advocate for enhancing educational programming through the arts. I recommend partnering with experienced arts-based educators or with community organizations whose focus is on enhancing group learning through the arts. Their expertise will enhance the program and bring in a different perspective.

More research and exploration needs to be done in the intersection of student leadership and systems thinking. I advocate for continuing the systems thinking conversation and to try different keys to open up the door for leadership educators to learn and embrace this approach. It is not new and it is not the only option, but it might enhance students' learning and perhaps lead to the transformation that society needs. Educators need to move away from the discrete and divided educational approaches that split disciplines and ideas. For those students who are interested in learning about leadership for social change, the conversation about social innovation, policy making, organizational change, and social economy is essential to have a more grounded perspective on change. Student leadership educators are successful at motivating students to engage in change (Dougan and Komives, 2007) and we can also be successful at describing the

complexity of our society, infusing a better sense of reality to our students and thus, increasing our effectiveness.

Facilitating systems thinking through Image Theatre

As I mentioned in chapter three, there are several pedagogies in which systems thinking could be integrated. However, my recommendations are particularly for those educators with an interest in facilitating Image Theatre or Forum Theatre, both of which were developed by Augusto Boal. The latter is a technique where participants or professional actors act out a scenario, inviting interventions from other participants to replace the protagonist or other characters and suggest alternate ways of engaging with the situation or problem. Most of these recommendations are based on my reflection on the workshop process and reflect the things that I would do differently in the future.

Preparation is key. If educators want to engage at a deeper level in the arts, particularly in techniques such as Image Theatre or other Popular Theatre techniques, I fully recommend intentional training, practice, and reflection. I realized that I would have been more effective if I had the space to receive feedback, share ideas, and try things out. More educators are engaging in arts-based pedagogies and having professional development opportunities, and spaces to share best practices and failures with other educators, can develop the capacity to implement such activities more effectively.

Explore real stories. The closer the stories and images explored are to participants' reality, the better the analysis that will surface. This might be obvious for those who are well acquainted with Theatre of the Oppressed techniques, usually exploring real life situations. As I mentioned in chapter three, I have used Image Theatre to explore concepts in isolation, and in this research study I encouraged the exploration of imaginary stories, however, if the key to

understanding systems thinking is the ability to trace connections then a better analysis will come from real scenarios that are occurring or have occurred, from tangible stories where identifying the characters is easy. Furthermore, through real stories it is possible to know which social systems students or their allies have access to and which systems are out of reach, thus, suggesting further connections or understanding.

It is possible to explore abstract concepts or fictional scenarios like participants did in this study. But although it was possible to explore the interconnections among systems such as government and corporations, it was a challenge to trace those connections to participants' lives and to name specific roles, thus, while avoiding stereotyping.

Educators could also engage people from various systems in the same workshop and make the exploration deeper and more complete. For instance, it might be possible to gather a group of students, administrators, and government representatives together in an arts-based workshop to explore current and real issues.

Cast the net or drill down. There is no right or wrong when it comes to learning and exploring through theatre. However, having a sense of the approach that needs to be taken will allow the facilitator to go deeper and explore one particular image or moment in detail as opposed to superficially explore many images. In the study I implemented a mix of approaches and drilled down when I asked to represent the complexities of the person in the middle, but I think that animating too many images in one workshop prevented me from exploring the bottom of the iceberg model in a more intentional and productive way.

Take the time that is needed. Rushing through an activity or skipping steps will compromise the learning process. Theatre-based learning techniques require time and as educators we must honour this and critically assess if a one-hour or even a three-hour workshop

will reach the outcomes and exploration required. Although I allotted enough time for exploration I was not able to facilitate de-mechanization activities in an intentional manner and that had an impact on how the images were represented in the beginning.

Reach balance. According to Kaner (1996), a facilitator can use *balancing* to draw other views in the group that may be present but unexpressed, among other arts-based activities where speaking is not required to share participant's perspectives.

Image Theatre processes invite participants to share their vies, to shout them out. However, not all participants feel comfortable speaking out loud so it is essential that the facilitator is always aware of the way the space for voicing ideas is been managed and make sure there is a process of inclusion by asking "what do others think". For example, *We have heard from Lee and from Fatma, are there any other ways of looking at this?* I noticed that participants in this study followed the lead of the loudest voice in some key moments and I wonder how the process would have been different if participants had explored other possibilities when representing the life story of the middle person.

Graphic recording is key. Graphic recording/facilitation has become a very popular process in many fields, including Systems Thinking, because it supports dialogue across difference and engages people through multiple senses. Tyler, Valek, and Rowland (2005) studied the impact of graphic recording in a large-scale international conference and state that "participants become emotionally involved through the visuals, first, through the experience of seeing their own words and thoughts reflected on the graphic recording; second, if they are non-English speaking, through the language translation process...third, through observing the movements of the graphic facilitators in the creation of the graphic recording; and fourth, through direct participation by adding their own words, stories, songs, and images..." (p. 148). Whether the process involves

eliciting ideas from participants or more participatory and engaged forms of graphic representation, I am certain that this tool and skill set will be an asset to any educator looking for other forms of representation and learning.

8. Conclusions

This journey started the moment I started questioning my effectiveness as a leadership educator, when I realized that I was not developing students as agents of change who could tackle the increasingly systemic problems of society. For many years as a student leadership educator, I focused on developing group leadership, and the purpose of the various programs I coordinated was to prepare students to work effectively with others. I had no doubt that students were learning skills that promoted group collaboration, but I needed to explore how to facilitate programs that focused on the complexity of social systems.

A second experience that led me to engage in research at the University of Victoria, was a workshop that Dr. McGregor and Dr. Clover facilitated at the Learning Democracy by Doing Conference at OISE in 2008. Their use of arts-based methodologies resonated with my interest of using drama as a learning tool. The implementation of techniques such as Forum Theatre and Image Theatre in the conflict resolution workshops I facilitated had been so powerful and effective in increasing awareness of the motivations of others in a situation. I was drawn to explore how else I could use theatre-based techniques to foster an understanding of the complexity of social systems.

My reason to engage in research was to explore a gap in the student leadership literature that I considered essential to move forward, to enhance the quality and effectiveness of the programs I facilitate, and to contribute more intentionally to solve the most pressing problems of our time. The intersection of systems thinking, complexity, and student leadership or civic engagement are still a fertile ground for exploration. Systems thinking and the ability to trace connections are important to anyone working for social change because it helps to develop a

more accurate picture of reality and to address issues considering a variety of perspectives and relationships.

This research study explored the intersection of systems thinking and Image Theatre in a context of student leadership development. The research question asked, *in what ways does the implementation of an arts-based pedagogical approach, such as Image Theatre, illustrate the potentiality for undergraduate students to better understand 'the bigger picture' and the interconnections of their intersecting social systems?* This inquiry was conducted through an arts-based methodology inspired by David Diamonds' Theatre for Living and considered the Social Change Model of Leadership Development as a theoretical framework based on a post-industrial and relational understanding of leadership as process.

Six students living in residence at the University of Victoria chose to participate in a Sustainability Leadership Development Program that offered both skill development workshops and an opportunity to make a difference in their community by engaging in a change project. This setting was ideal for the study because it allowed the students to engage in a non-hierarchical leadership process that aimed at making change in the community.

The study was conducted as part of the program and during a workshop where Image Theatre and graphic facilitation/recording were used in parallel to trace connections among the characters portrayed by the participants. The *Understanding the Bigger Picture Workshop*, from which I collected the data for this study, allowed me to understand that students do have an awareness of systems but, as literature suggests, it is a challenge to trace relationships or to consider long-term consequences of actions. The themes that emerged during the analysis include the tensions of individuals 'caught in the middle' or system's integrators and the role of activism. It was clear that students understood systems as fragmented units and, thus, there is

potential for more research and intentional practice emphasizing the interconnections and relationships among systems within the curriculum, and assessing its short and long-term impact.

Relationships and dynamics in social systems are so complex that creative forms of representation can shed light in more powerful ways than traditional pedagogies. Image Theatre as a creative form of analysis invites us to develop insights that would otherwise be inaccessible and encourages us to see things differently and to embody different perspectives. Engagement with the arts fosters a meaningful understanding and potential for shared meaning.

Furthermore, through this journey I explored my practice as an educator and facilitator. The use of metaphors and imagery, particularly the crystal, assisted me in analyzing the phenomena from different views and shed light into my practice and the field. I leave this process better prepared to engage student leaders and more knowledgeable about the intersection of student leadership and systems thinking.

More than ever I see that the field of student leadership has a great potential to empower and to prepare students as agents of change and I call for the inclusion of the systems thinking conversation in the field. I see systems thinking as particularly relevant for those educators using the Social Change Model of Leadership Development as a foundation for their programming because it sets the basis for taking interconnections and relationships a step further. Not only student leadership educators can benefit from the systems thinking paradigm, but all educators and leadership practitioners. And the theatre-based pedagogy described in this study is not only beneficial to the student leadership field, as demonstrated in this thesis, but also it can also be a valuable tool for deepening learning in other university and college settings.

As I mentioned in chapter one, climate change and environmental sustainability are problems that deeply concern me and I hope that my work will be useful in ‘connecting the dots’

and preparing students for addressing the complexities of our time. I believe that our society should not depend on the arrival of “someone” who will resolve our most pressing problems. Diamond (2007) suggests that both the oppressed and the oppressors are part of the living community; therefore, to alter the systems in which we live, those in privileged positions can also become re-creators of the world; understanding and naming their reality and power, and fighting the systemic cycle of oppression that is invisible to most of us. In other words, I believe that higher education students are in a privileged position to exert a significant influence on their social systems. Through systems thinking and Image Theatre they may become more empowered and knowledgeable about how to effect change on the internal workings of our systems and on the motivations of the actors with whom we interact.

Orr (1991) argues that the world “needs people of moral courage willing to join the fight to make the world habitable and humane” (p.55). However, it is not only willingness that is needed, but also an acute understanding of social justice. Perhaps, if we can advocate for a systems thinking framework in the field of student leadership and we facilitate complexity in an accessible manner, we can stop waiting on the heroes and begin preparing every single student as an agent of change for a better, just, and sustainable world.

Three Strands in the Braid

Weaving Learning Into Wisdom (Paula Underwood, 1994, p. 19)

*Reach out with your Mind
And touch the edges of each thing
as it exists*

*See
The configurations
of form and colour
Bend and shape Awareness*

*Reach out with your Hand
And sense the depth
of the texture of Life
The nature of warp and woof
The weaving of one way of being
with another*

*Celebrate the complexity
of Wholeness*

*Reach out with your Heart
And sense*

*the essence of things
Hear the throb of the Life Beat
The Universal pulse
That paces the beat of your heart
and mine*

*Reach out with Mind
and Hand
and Heart*

*And see how it is
that Life is One
Undivided
by the divisions of our perceptions*

*Reach out with Mind alone
or Hand alone
or even with a lonely Heart*

*And see how it is
We limit ourselves*

*Celebrate the joining
of the Three-Way Path*

*Mind
and Hand
and Heart
Weave into a full perception
Join Wholeness
and Dimension
and Diversity*

Into a singularity of Vision

Let it be so...

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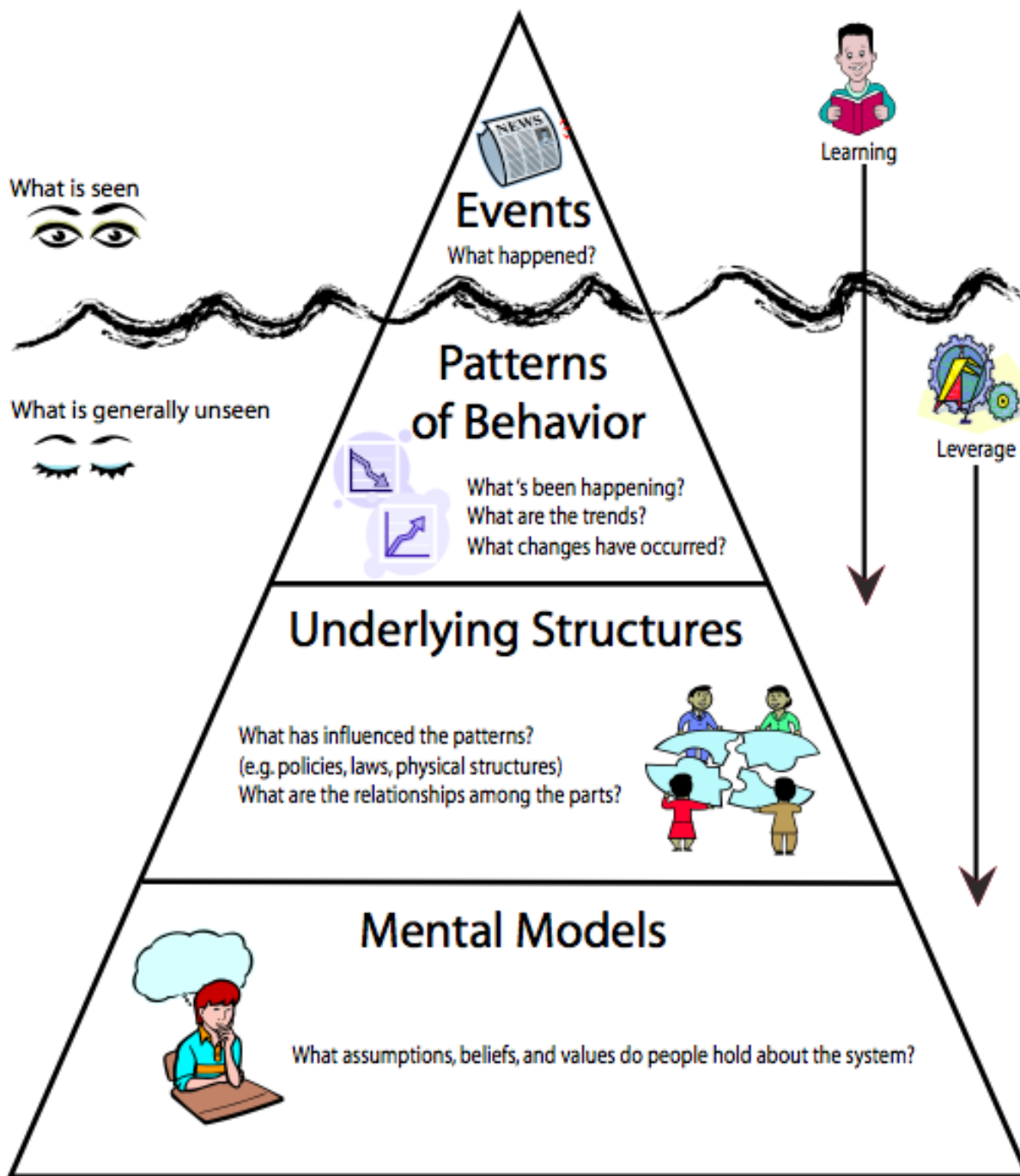
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Appendix

Appendix A: Systems Thinking Habits (Waters Foundation, 2006)

<p>Seeks to understand the big picture</p> 	<p>Observes how elements within systems change over time, generating patterns and trends</p> 	<p>Recognizes that a system's structure generates its behavior</p> 
<p>Identifies the circular nature of complex cause and effect relationships</p> 	<p style="text-align: center;">Habits of a Systems Thinker</p>  <p style="text-align: center; font-size: small;">©2010 Systems Thinking in Schools, Waters Foundation</p>	<p>Changes perspectives to increase understanding</p> 
<p>Surfaces and tests assumptions</p> 		<p>Considers an issue fully and resists the urge to come to a quick conclusion</p> 
<p>Considers how mental models affect current reality and the future</p> 	<p>Uses understanding of system structure to identify possible leverage actions</p> 	<p>Considers both short and long-term consequences of actions</p> 
<p>Finds where unintended consequences emerge</p> 	<p>Recognizes the impact of time delays when exploring cause and effect relationships</p> 	<p>Checks results and changes actions if needed: "successive approximation"</p> 

Appendix B: Iceberg Visual (Water's Foundation, 2006)



Adapted by Systems Thinking in Schools, Waters Foundation, from Innovation Associates, Inc. Clip art was obtained from microsoft.com and used according to rules of use. August 2005.

Adapted by Systems Thinking in Schools, Waters Foundations

Appendix C: Letter of Approval

August 16th, 2012

Re: Letter of Approval

To Whom It May Concern:

Please accept this letter as confirmation that Residence Services has given approval to Valeria Cortez to approach residence students to elicit participation in her research study on the impact of forum theatre in helping undergraduate students develop systems thinking awareness. Residence Services has also approved the proposed research methodology which includes a questionnaire and brief interview, observations, and analysis of workshop artefacts.

We are thrilled to be working with Valeria on her research and believe her study will benefit both the discourse and our residence students.

If you have any questions, please feel free to contact me.



Manager, Residence Life and Education



Appendix D: Program Plan

Program Name:

Environmental Sustainability and Leadership Development Program

Mission Statement:

This program exists to generate support for environmental change through the development of leadership efficacy, openness to the ideas and struggles of others, and the understanding that we are interconnected in our social systems.

Vision:

Participants of the program will become a living learning community committed to implementing a change project and motivated to continue making change for the betterment of society.

Statement of Need:

1) The ability to take steps towards building a more sustainable self and society requires far more than knowledge about sustainability, it requires skills, attitudes, competencies, dispositions and a review of values. It is active learning, self-reflection, self-directed inquiry, learning by doing, engagement with real life issues and learning with communities of practice. (The Handbook for Sustainability Literacy, p. 10-11). Therefore, encouraging and supporting students to facilitate change is key in higher education environments.

2) The Council for the Advancement of Standards suggests that Student Leadership Programs, amongst other goals, should incorporate sustainability practices in the management and design of programs. This suggestion supports the UVic Residence Life and Education Curriculum for the themed communities, particularly around the sustainability domain.

Strategies:

- Implement arts-based learning as a pedagogical approach
- Partnership of Researcher/Residence Life Staff
- Mentoring from senior students

Goals:

- To set the foundation for the development of a comprehensive sustainability programming for this and other themed communities.
- To serve as a container for a research study in the Faculty of Education.

Theoretical Framework:

- The Social Change Model of Leadership Development

Implementation:

- 1 Info session to recruit participants
- Seven educational & skill development workshops
- Mentoring
- 1 Group project
- Assessment, reflection, and graduation ceremony

Target group:

- Undergraduate students living in the sustainability themed community at UVic

Program Learning Outcomes:

By the end of the program participants...

- will have an increased leadership capacity (knowledge, skills and behaviours)
- will have an increased leadership efficacy (one's internal beliefs regarding their leadership capacity)
- will participate in one environmental sustainability initiative that goes beyond their regular involvement

Short-term learning outcomes:

Session	Date	Purpose/ Learning Outcomes
Orientation & Recruitment	September 10, 2012	Build community, set expectations and generate commitment
Perspectives on bringing about change	September 17	As a result of this workshop students will: Have a new perspective of leadership and change/be able to articulate at least one leadership goal/start a leadership action plan
Creating positive group dynamics	September 24	Students will learn the tools to develop healthy relationships by enhancing their communication skills
Climate change presentation	October 22	Students will have an increased awareness of climate change and its consequences
Building coalitions on campus	October 29	Students will learn how to establish coalitions in their own campus
Effecting change on campus	November 5	Students will learn about sustainability on campus
*Understanding the bigger picture	November 24	Students will have a better understanding of the bigger picture/ realize how important that is when effecting change
Change Project Implementation	January 26, 2013	Screening of Last Call at the Oasis
Reflection and Recognition ceremony	February 2013	Students will reflect on their learning and development/ feel empowered to continue their involvement on campus

Indicators of Success and Assessment Plan:

- Continued participation in program: Number of students receiving the Certificate.
- Qualitative feedback from Community Leaders
- End of year focus group to assess learning outcomes
- Journal entries from students
- Impact of group project

Materials:

- Food for every workshop
- Accessible and spacious room with movable furniture
- Flipchart
- Markers
- Nametags
- Camera
- Tripod
- Certificates
- Whiteboard
- Consent Forms
- Image Release Form

Appendix E: Letter of invitation

Hello!

My name is Val Cortes and I am a Master of Arts student in the department of Leadership Studies here at UVic. I am conducting a research titled Popular Theatre as a Catalyst of Systemic Thinking and I am looking for participants for this study who are interested in engaging in theatre activities as a way of exploring environmental issues.

Are you an undergrad student living in the sustainability-themed community or a participant of the sustainability leadership program? this is what participation means for you:

- Participate in one 4-hour workshop where you will engage in theatre games and create images that represent sustainability issues that are important to you.
 - The workshop will take place in the South Tower boardroom on **Saturday November 24 from 11 to 3pm** (lunch included)
- Write one (or more) journal entry where you reflect on your experience in the workshop.
- Receive one \$10 gift certificate from the UVic bookstore.
- Have fun

If you are interested or want to know more about the study let me know by calling or texting me <Phone>, emailing val.cortes@uvic.ca, or letting your Community Leader know before November 15, 2012.

The details of the study, the theatre activities, and potential risks are described on the consent form attached.

I will be happy to answer any questions that you have.

Thank you!

Val Cortes

Appendix F: Consent form



Participant Consent Form

Popular Theatre as a Catalyst for Systemic Thinking

I, Valeria Cortes, am inviting you to participate in a research study entitled *Popular Theatre as a Catalyst for Systemic Thinking*. I am a Master of Arts student in the department of Leadership Studies at the University of Victoria. If you have further questions you can contact me by phone at 778 977 3180 or email at vcortes@uvic.ca. As a graduate student, I am required to conduct research as part of the requirements for a degree in the Faculty of Education. My research is under the supervision of Dr. Catherine McGregor and you might contact her at cmcgreg@uvic.ca.

Purpose: In this research I will investigate the impact of Image Theatre in helping a select group of undergraduate students develop systems thinking. The study aims to respond one research question: In what ways might the implementation of an arts-informed pedagogical approach, such as forum theatre, lead to a better understanding among participants of the interconnections and intersecting nature of social systems and enable enhanced systems thinking? You are being asked to participate in this study because you are an undergraduate student living in residence or are part of the Sustainability Themed Community at UVic.

This Research is Important because: Many scholars and practitioners suggest that systems thinking is essential in the effective understanding and solving of the complex dynamics at the core of many of the problems that our society faces, such as inequity, environmental degradation, or climate change. This research seeks to explore one pedagogical approach -- image theatre -- as a tool to explore the dynamics of how actors approach complex system problems; image theatre allows an approach that permits participants to both embody and enact their responses. This research explores the potentiality of an arts-based systemic approach that may help student participants learn how to better navigate their systems. A second potential outcome is that this research will be used to inform the practices of student leadership educators who are also concerned with improving their professional practice by including systems thinking knowledge, skills and habits in their programs.

Procedure: If you agree to voluntarily participate in this research, your participation will include a time commitment of four hours. Please note that photos and video of you will be taken for data analysis and dissemination. You will be asked to fill in an image release form before entering the workshop.

What is Image Theatre? It is a popular theatre technique that is used to create still images and explore different concepts such as relationships, emotions, etc. In Image Theatre, participants are encouraged to use their bodies, rather than language, to portray and communicate realities and make thought visible. Participants sculpt (create visual poses) to express a situation or an issue and then the images are dynamised or "brought to life" (brought into action). Participants sculpt each other's bodies through moving the limbs directly or through imaginary strings as if moving a puppet. The images stay still while analysing them.

Voluntary Participation: Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or explanation. If you do withdraw from the study, you will be asked for your consent to use of data collected from you up until your withdrawal. It will be your decision to agree to use the data or not. If you do not agree, your data will be destroyed. However, photographs and videos of you will not be removed, your image will be blurred.

Coercion: While you are being offered a small token of appreciation in the form of a UVic gift card for your participation, it is meant only as a recognition of your time offered to the research project. If you agree to participate only because of the gift card, then you should not participate.

Benefits: The benefits of those participating in the workshop include knowing about Image Theatre, an understanding of social systems, and development of skills that are transferable to other settings. Benefits to society include developing awareness of systems and the potential of developing more effective educational programs.

Risks: there are some potential risks to you and they include feeling uncomfortable while 'sculpting' each other or experiencing physical discomfort while staying still in a pose. To prevent those risks from happening the group will create group agreements to ensure that all participants feel comfortable and respected, also you can choose how you prefer to sculpt or be sculpted and while you will be invited to join in all the activities you will never be forced to participate in anything that makes you feel uncomfortable or at risk.

Anonymity: I cannot guarantee your anonymity or confidentiality because you will be participating in a workshop with other people and because your image/video will be used dissemination purposes. Even though your name will never be shared, you may be recognizable by your visual images shown in the results of this study.

Dissemination of Results: I anticipate that the results of this study will be shared with others in the following ways: my thesis, in articles presented at scholarly meetings or published in journals and training sessions of leadership educators across Canada and through the Internet.

Disposal of Data: All data will be kept in a locked filing cabinet in my home, and all electronic documents will be kept under password on personal computer. All electronic data from this study will be erased, and paper copies will be shredded two years after I defend my thesis.

In addition to being able to contact me or my supervisor, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the human research ethics office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers and that you consent to participate in this research project. Thanks!

Name of Participant

Signature

Date

A copy of this consent will be left with you, and a copy will be taken by the researcher

Appendix G: Image release form

Image Release Form

I consent to have my photograph and video taken at the workshop on November 24, 2012 and used for the purposes of the study entitled **Popular Theatre as a Catalyst for Systemic Thinking** being conducted by Valeria Cortes as a part of her MA thesis at the department of Educational Psychology and Leadership Studies at the University of Victoria.

I understand that although my name will never be shared, I may be recognizable by my visual image shown in the results of this study.

Also I understand and consent that my image will only be used by the researcher for dissemination purposes through the following:

- Thesis/dissertation/class presentation
- Presentations at scholarly meetings or conferences
- Internet, through the University of Victoria dissertations database
- Published articles, chapters or books

I understand that I can withdraw from the study anytime, however photographs taken prior to withdrawal will not be removed. My image will be blurred.

My signature on this form indicates that I fully understand and consent to have my photographs and video taken and used in this research.

Name of Participant:

Signature of Participant: _____

Date: _____

Appendix H: Ethical approval



University
of Victoria

Human Research Ethics Board
Office of Research Services
Administrative Services Building
PO Box 1700 STN CSC
Victoria British Columbia V8W 2Y2 Canada
Tel 250-472-4545, Fax 250-721-8960
Email ethics@uvic.ca Web www.research.uvic.ca

Certificate of Approval

PRINCIPAL INVESTIGATOR	Valeria Cortes	ETHICS PROTOCOL NUMBER	12-390
UVic STATUS:	Master's Student	ORIGINAL APPROVAL DATE:	04-Oct-12
UVic DEPARTMENT:	EPLS	APPROVED ON:	04-Oct-12
SUPERVISOR:	Dr. Catherine McGregor	APPROVAL EXPIRY DATE:	03-Oct-13

PROJECT TITLE: **Popular Theatre as a Catalyst for Systemic Thinking**

RESEARCH TEAM MEMBERS: None

DECLARED PROJECT FUNDING: **Canadian Association of Colleges and Universities Student Services**

CONDITIONS OF APPROVAL

This Certificate of Approval is valid for the above term provided there is no change in the protocol.

Modifications

To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.

Renewals

Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.

Project Closures

When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.

Certification

This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria Research Regulations Involving Human Participants.



Associate Vice-President, Research

12-390
Cortes, Valeria

Certificate Issued On: 04-Oct-12

Appendix I: Workshop agenda

Time	Activity	Set up
5 min	<p>Grounding</p> <p>“Good morning. Let’s take a moment to mentally prepare for our time together. I invite you to close your eyes and focus on your breathing and focus on the now. Let go of your worries, whatever is outside this moment, let’s put it aside and invite creativity and openness of mind, body and spirit. Stay present. Let’s acknowledge each other’s presence, the territory, and let’s give permission to the camera to be part of our setting. Thank you for choosing to be here. Welcome everyone!”</p>	Participants in a circle on floor or chairs
8 min	<p>Introduction, research intention-</p> <p>The invitation today is to look at the bigger picture when working towards change. I believe that if as change agents we take a moment to understand the bigger picture, we can understand the issues better and be more effective with our actions. So my intention today is to discover how Image Theatre can help us understand the bigger picture.</p> <p>We are going to deconstruct and look at various images from two layers:</p> <p>A descriptive: You will share what you see</p> <p>And a symbolic connection between your experience and seeing the bigger picture</p> <p>Also I ask you 3 things: Take care of yourself, take care of others and always assume positive intention.</p> <p>Add info about chime for time management</p> <p>Invite Avril to tell us how her work will enhance our learning and understanding of the bigger picture</p>	
8 min	<p>Getting to know each other</p> <p>Let’s take a moment to introduce ourselves and at the same time de-mechanize our body and mind. (Example). You are going to say your name and to make a big exaggerated movements of an activity you enjoy doing + a sound. Then everyone says “hello name, doing the same action”</p>	Participants move to the open space
2 min	<p>Catalyst</p> <p>A song, image, poem, something that lures, grabs attention, prepares for the work- A water bottle? Show the documentary trailer of “Last Call at the Oasis”</p>	

- 10 min **Reaction to catalyst: Pair-up Images**
 “Stand facing your partner and decide who will be the *sculptor* and who will be the *intelligent clay*. The sculptor will create a shape in complete silence”. The intelligent clay will stay still and will fill the shape with thought and emotion indicated by the body position.”
 Create one image, then destroy it and do a second one. Place images as if we were in an art gallery, place them in relation to one another so that they tell a story.
- 20 **Debrief first time:** What do you see?
Debrief second time: Place images in relation to each other in a way that represents looking at the bigger picture
- 10 **Creating images about change**
 Each of you will create an image that represents:
 1. The problem that you would like to change in your residence building.
 You will do this in absolute silence. Each image must contain a minimum of two characters
- Then we will look at the images and we will vote for one that we will animate. You will vote for the image that affects you the deepest, that has the strongest connection to your life. This means that one of the images of the group is going to get activated and the others will not. Please don't take this personally.
- 30 min **Lunch break** 12:30 to 1pm
- 5 min **Clap song**
 60 min
- 1 to 2pm **Dynamizing images**
 Internal monologue- everyone does it at the same time
 “I want”
 What are you afraid of?
 Have you been this person?
 Wide shot: Are there other people you think should be in the image?
 Invitation to come and be them + internal monologue
 Secret thought
 1. The change that you want to bring about with the film
- 5 min Discussion
Silent Break

40 min

Reflection2:05 to
2:45pm

I invite each of you to come up with a metaphor that describes what working towards change on campus represents. (Begin by giving examples of metaphor: "a feather in a windstorm," "a cloudy day with occasional bursts of sunshine," "a domino effect", "planting seeds", "turning the soil"

(Write the metaphors on a flip chart and read them out to the group looking for common themes or patterns.)

Now you will choose one metaphor that you'll like to work with. This metaphor will be the kick-off phrase for doing a Stream of Consciousness timed writing. When writing use descriptive and metaphoric language use your pen as if it's a paintbrush. Play with language and the sounds of words. Encourage them to keep the pen moving. If you get stuck, write whatever comes to mind. Ie. "I don't know what else to say." This will move you right into the next thought.

You will write until you call "stop", for five or seven minutes, without taking their pen off the page.

--

Now read your writing in silence and circle two or three phrases that you particularly like. You will gather the individual phrases together to make a group poem. It's ok to use short connective words such as "and." A helpful hint is to choose a first line and a last and then fill in between.

10 min

Wrap up

Reading of poem
Circle of So What?

Appendix J: Poem

Take bacon-chicken pizza, all the ingredients come together like little atoms quarks, really, making up an electron.

We have “veggies” with all these different histories, experiences and ideals brought together. Everyone will be bringing different strengths and viewpoints to the table... People have to gather up like veggies in a pizza.

*Conservative army gun toting dad only for mozzarella cheese, green peppers, onions, mushrooms, pepperoni and moderate consumers enjoy tomatoes, ham, salami, garlic, bacon, and Italian sausage.
And liberal lovers activists against hunting pipelines wish for asiago, spinach, carrots, potatoes, prosciutto, cauliflower, and turkey.*

Cheese of planning, of logistics, of cohesion...

Everything we know of comes from small microscopic bits and pieces that fit into infinite creations.

Once the pizza is made everyone will have some but people will use it for different reasons and enjoy different parts

Each person take a slice of the size of which they can digest and eats it slowly or quickly or dipped in ketchup depending on the nature of their hunger.

The baking of the pizza is the discussion between all of us and allows us to come to a common goal sometimes it can be unsuccessful like when making a pizza.

Appendix K: Theatre Games

Adapted from Boal (2002) and Diamond (2007)

Sound circle:

Participants sitting in a circle and passing on claps and rhythms without any words

Blind cars:

Push-pull : Shown on chapter 5

Colombian hypnosis:

In pairs. One person holds her open hand, fingers upward, about 2-3 inches from her partner's face. She then starts moving her hand about slowly, while her partner tried to keep his face at exactly the same distance from her hand, like her hand is pulling or pushing his face about. Switch sides and partners after a couple of minutes.

Speed gestures (Diamond, 2007):

Moving from simple sound and gestures into exchanging gestures and sentences as a way to start improvisations.

Magic clay:

Participants imagine that they have a ball of magic clay that they can mould into a shape