

Create & Grow Strong: Using Creative Exploration, Expression & Celebration to Foster Resilience in Youth

By Laura Stavro-Beauchamp

A thesis exhibition presented to OCAD
University in partial fulfillment of the
requirements for the degree of Master
of Design in Digital Futures.

Toronto, Ontario, Canada.
April, 2015.

 Laura Stavro Beauchamp 2015

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Abstract

This research explored the idea that a creative project undertaken in a group setting could help youth to cultivate the traits that contribute to increased resilience elsewhere in life. This thesis was revised based on findings derived from praxis, reflective practice and grounded theory research.

Create & Grow Strong, a six-week workshop program and showcase celebration, was developed with art and play therapy in mind, but without the goal of direct psychotherapeutic intervention. There was strong evidence that this was successful in fostering feelings of pride, confidence and hopefulness and in creating an environment of trust that allowed for group discussion about issues prevalent in the local community. The study was based in Toronto's Regent Park - an area associated with crime and poverty that was undergoing a government-initiated revitalization.

This thesis considers the inspiration for the research, the existing work both by theorists and practitioners working in the fields of social work, education, psychology and interaction design. Also the author's own design process, both technologically and, as the author built the workshops, the results and the insights gained from a grounded theory approach. Finally, potential future iterations of the work are discussed.

Acknowledgements

First and foremost, thank you Break Free, Ayabar Nahk and Jub Jub Exo (you know who you are!) for opening your lives and experiences to this project and for working with me to develop the first iteration of the Create & Grow Strong Workshops. It was a privilege to work with such articulate, creative and passionate people.

Deepest thanks also to my family, especially my mother Debbie Stavro, my brothers and sisters and Glenn & Kathleen Christie, for all the love, support and encouragement.

I would also like to offer profound thanks to my program director and primary adviser Tom Barker for all of the valuable opportunities and advice he has afforded me over the course of my time at OCAD U, and to Nick Puckett and Jason Bruges for their technical advice and expertise. Additional thanks go out to Adonis Huggins and Pat Whittaker at Regent Park Focus Youth Media Arts Centre for allowing me into their amazing space.

Most importantly, I am grateful to my loving husband Alexander Christie for his cheerleading, endless logistical and emotional support and his bottomless faith in me.

To the little one to come, I can't wait to meet you...

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The Story

Introduction

Resilience is being recognized more often as an important trait as the world continues to face a future that is rapidly changing and uncertain. Youth and children will be the creators of that world and those who most need the ability to adapt quickly and creatively to the changes that it brings. This adaptation will call on each individual's resilience if they are to thrive.

As such, this work defines resilience to be a combination of a person's ability to meet challenges and adversity with confidence, self-knowledge and hope and their means of recovering from setbacks or trauma to continue forward to pursue their goals in a healthy and meaningful way. In this context resilience is based on the resources they have access to and their means of taking advantage of them. This definition is the

amalgamation of the concepts of resilience outlined by theorists including Michael Ungar, Andrew Halata and Alex Zautra.

With this in mind this thesis set out to explore the hypothesis that:

By undertaking a creative project, in a group setting, youth begin to cultivate the traits that contribute to increased resilience elsewhere in life.

It was investigated using a variety of research methods including praxis, reflective practice and grounded theory in a workshop setting with three youth living in the low-income Regent Park neighbourhood of downtown Toronto. These methods were integrated with Donald Winnicott's theories of play and others in the realm of art therapy, social work and resiliency.

The workshop curriculum was delivered over six weekly, two-hour sessions that encouraged youth to consider their feelings as connected to the physical locations, characters and landmarks in their daily lives and to express them as an art work. First, through the creation of a physical prototype that includes a landscape or environment based on the contextual theme, a character that will move through the world and three fantasy elements that will appear in response to the movement of the character as a cursor. These different physical components are then photographed and merged into a single responsive digital artwork that is coded (within a template) by youth using Processing, a programming language and development environment. The final

work is projected on a wall at the culminating showcase, inviting interaction and explanation from the artists, guests and visitors to the celebration.

This thesis suggests, over the next 8 chapters, the related subsections and appendices that the pilot project proves the workshop contributed to the increased confidence, hopefulness and self-knowledge of participating youth in the context of their lives in Regent Park. As such it merits further development and expansion to meet the needs of other youth in the neighbourhood and those elsewhere in Toronto who are facing challenges related to poverty, violence, crime and change management in their families and communities.

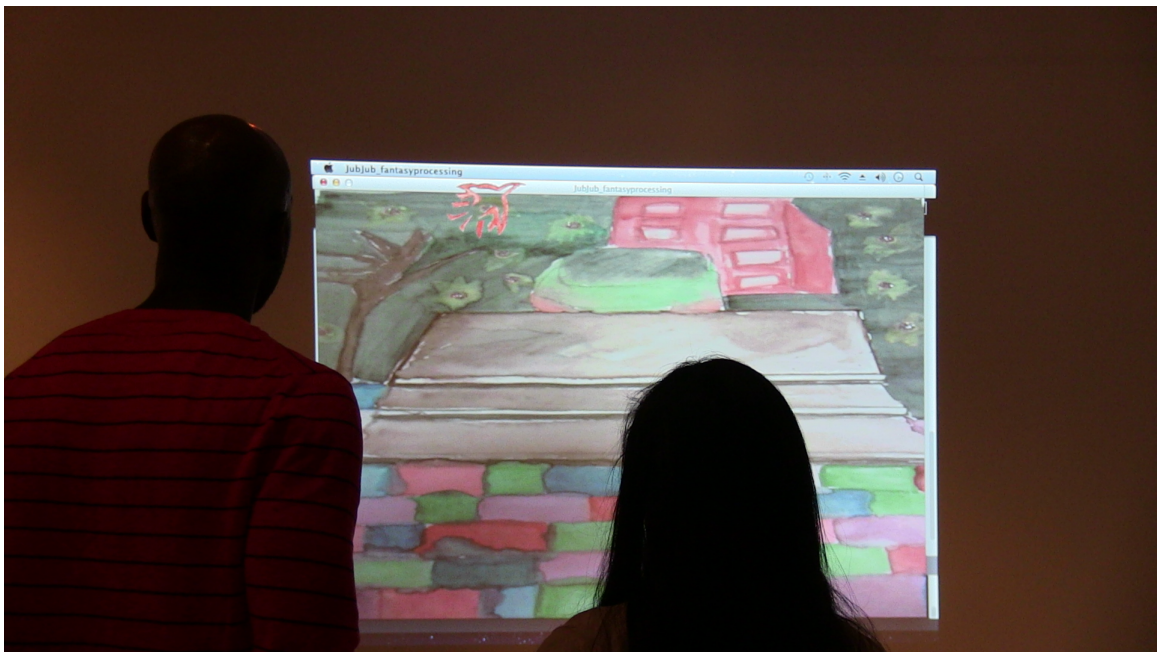


Figure 1: Image from the Create & Grow Strong showcase, December 2014.

Motivation for Undertaking this Research

In 2010, I moved to Bolivia to work as a volunteer at the Ciudadela orphanage, outside of the city of Cochabamba. Most of the children were in the care of the state because their families were too poor to care for them. They had school for half of the day and for the second half hung around the facility, which was large, but rundown with poor sanitation and very few resources. The staff were caring and worked very hard but were exhausted from long hours and dealing with the daily concerns related to housing 85 children from infancy to 14 years of age.

While there I decided to start an art program for the kids. I raised money and bought supplies, fixing up a disused space to host the program. The kids loved the work and it was clear that the mornings they spent drawing, sewing, colouring and painting improved their experience of life at the orphanage.

I don't know if that program has continued on at Ciudadela but I do know that it has lived within me since that time and has inspired me to further explore the ability of creativity and self expression to help improve confidence, quality of life and resilience in children, youth and adults.

Last year, when learning about coding and physical computing at OCAD I worked on a project called Projector Puppetry. At the time I developed it using fiducial markers

and computer vision to allow for characters to move within a scene projected on the wall.

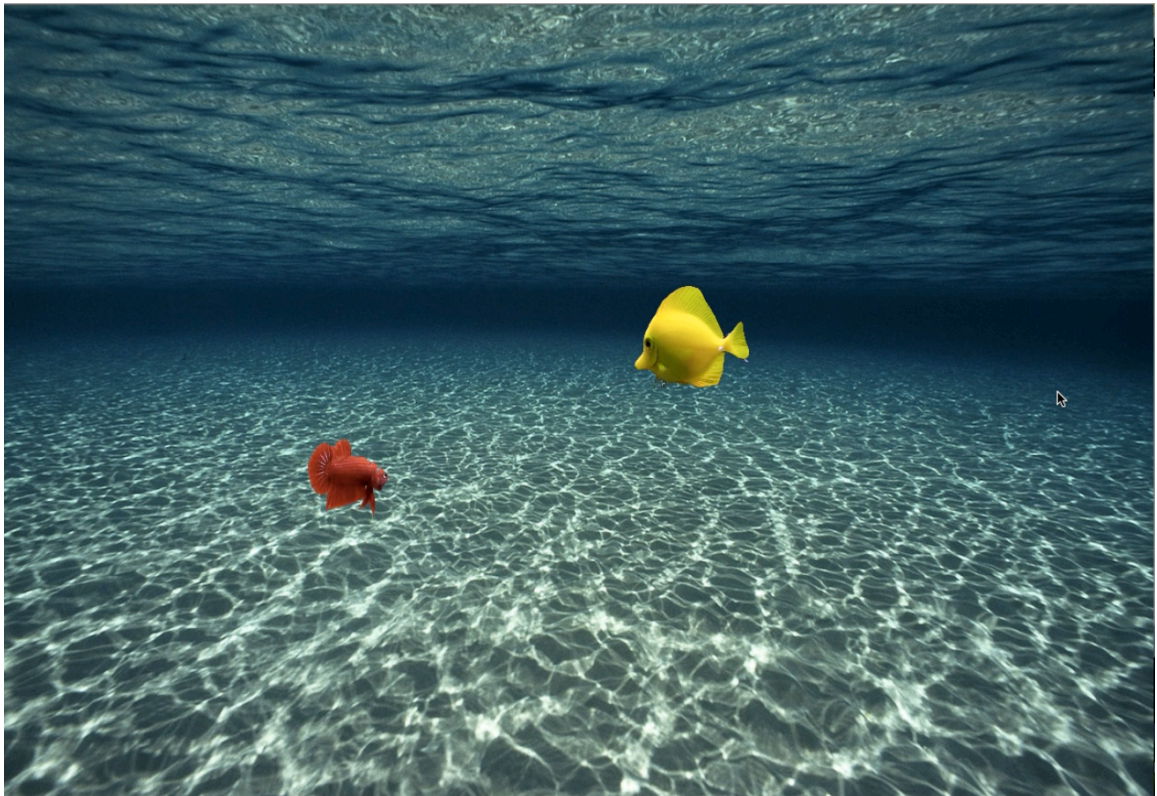


Figure 2: Image from Projector Puppetry project by Laura Stavro-Beauchamp.

The work sparked an idea – what if one could put oneself into the scene? Then flying or running or playing would be possible (if only vicariously) when movement or expression might otherwise be limited.

I thought of kids in hospital who weren't allowed out of bed, unable to play with one another, unable to move around. This technology could allow for them to play together in single environment of their own creation.

With some further extension, it could also allow for doctors to explain surgeries and other medical concepts to patients visually or help therapists to have deeper conversations with children and youth as they confront traumas or challenges in their lives.

This line of thought led me to consider possibilities for other kids, those not in hospital but who may have other limitations or be facing other challenges.

When I left my career as a financial journalist and television producer to come to OCAD I did so because I felt lost, unhappy and unfulfilled. I examined my life and came to the realization that these feelings were a result of stifled expression and hampered creativity. I worked in a job where I constantly made creative, productive suggestions for new shows, web improvements, sponsorship ideas and products and they were never allowed to come to fruition. My creativity, my satisfaction and my expression were being impeded by a lack of budget, aversion to risk and a lack of curiosity and creative drive by my management.

I finally left the company as a result of reading up extensively on creativity and in the following months I built a business plan for The Creativity Campus, a series of creativity oriented workshops to serve Toronto families. I began following artistic pursuits and conducting experiments and then I was offered a place in the Digital Futures program at OCAD U.

So, as I struggled with whether to move forward with the business or to go back to school I realized there was no conflict at all. I immersed myself in a creative environment, conducted experiments, learned new skills, took risks, worked with exciting new colleagues and researched creativity, immersive environments, resilience and education at every possible opportunity.

The result is this thesis. A product of all of my curiosity, creative inspiration, business drive and desire to help others, particularly children and youth, to connect to their creativity in ways that will improve their lives now and in the future.

The Theory

Before we dive into the research we must consider why both creativity and resilience are important, what relationship they have to one another and why they strengthen each another when they are developed in tandem. When considered together, theory from the fields of social work, behavioral and developmental psychology and play

theory make a strong case for the value of creative activity when working to cultivate traits of resiliency in youth.

Defining Resilience

Over the past few years the concept of resilience has been gaining popularity in a number of fields, following hurricane Sandy New Jersey rebranded itself a “State of Resilience”. The Harvard Business Review has published a number of pieces dedicated to corporate resilience, what it is, why it matters and how it can be encouraged and, used in its original, ecological context, the resilience of our planet in the face of climate change is now being called into question.

But resilience is more than a buzzword and more than an ecological concept, in fact, studies of the human manifestation of resilience are growing in number as we begin to face the challenges presented by our ever changing world and researchers ask: How are climate change, inequality and technology affecting us psychologically? Can we strengthen our mental and emotional resilience so as to be able to better address the non-physical aspects of the new challenges we face?

Emotional or psychological resilience, defined by the American Psychological Association as the ability to “bounce back” after meeting adversity, is now being

recognized as an essential human trait. But this is not the only, or the best, definition for my purposes.

Alex Zautra, John Hall, Kate Murray and the Resilience Solutions Group out of Arizona University recently defined resilience as an integrative construct that provides an approach to understanding how people and their communities achieve and sustain health and well being in the face of adversity. (Zautra et al., 2008.)

This perspective is consistent with that of Michael Ungar, a leading resiliency researcher from Dalhousie University, who helped to develop the Children and Youth Resiliency Measure (CYRM) (Liebenberg & Ungar, 2012.) that is currently being used by the World Bank as part of its Education Resilience Approaches initiative. Ungar also defines individual resilience in relation to the community, noting that it is best understood as:

“... both an individual’s capacity to navigate health resources and a condition of the individual’s family, community and culture to provide these resources in culturally meaningful ways.”
(Ungar, 2006.)

Zautra builds on these further, noting that the APA “bouncing back” from adversity point of view is now considered to be the “recovery” definition while the “sustainability” definition is concerned with a persons ability to move forward and sustain positive engagement work, play and social life despite having confronted adversity. (Zautra et al., 2008.)

Taking these into account, in the context of this study, I define resilience to be:

a combination of a person's ability to meet challenges and adversity with confidence, self-knowledge and hope and also their means of recovering from setbacks or trauma to continue forward to pursue their goals in a healthy and meaningful way, based on the resources they have access to and their means of taking advantage of them.

Creativity, Positivity, Relaxation and Resilience

“Only in playing is the individual child, adolescent or adult able to be creative and use the whole personality, and it is only in being creative that the individual discovers the self.”

(Winnicott, 1971.)

My definition of resilience informed the development and evolution of the workshop series. The Create & Grow Strong program that I created aims to encourage youth facing adversity to explore their creativity while considering the world they live in and its influence on their daily lives. In its original form the series consists of six weekly two-hour sessions that encourage youth to consider the physical locations, characters and landmarks in their daily lives and to express them as an art work. First, through the creation of a physical prototype that includes a landscape or environment based on the contextual theme, a character that will move through the world and three fantasy elements. These different physical components are then photographed and merged into a single responsive digital artwork that is coded (within a template)

by youth and projected on a wall at the final showcase to be interacted with by guests and visitors to the celebration.

I sought to create an environment that provided respite from adversity and a place of relaxation where creativity could be accessed as a means to connect with the self and to engage in play toward growth and healing. This prioritization of relaxation is consistent with Donald Winnicott's theory of play, outlined in his 1971 work, *Playing and Reality*, in which he posits:

“Play [that is universal] facilitates growth and therefore health; playing leads to group relationships and can be a form of communication...”
(Winnicott, 1971.)

Winnicott's play theory notes that in order to reach an expression of I AM, I am alive or I am myself (Winnicott, 1962.), a position where “everything is creative” three specific conditions must be met: a) relaxation in conditions of trust based on experience b) creative, physical and mental activity manifested in play and c) the summation of these experiences forming the basis for a sense of self.

This attainment of a sense of self is just one hallmark of resilience (Ungar, et al. 2005, Jindal Snape et al., 2013.; Prescott et al., 2008.; Macpherson, Hart & Heaver, 2013.) . I made use of Winnicott's conditions as a workshop facilitator to create an environment somewhat consistent with that which would encourage participants to be creative from a relaxed place. This relaxed place would allow them to connect with

a sense of self in an effort to help foster a sense of pride, confidence and hopefulness as they worked within the group to confront creative and coding challenges and understand the context of their changing neighbourhood.

This approach is also consistent with positivist psychology. Zautra emphasizes the importance of focusing on the assets of individuals when considering resilience. (Zautra et al., 2008.) He and his colleagues point out that resilience is not a rare trait, rather it is a common one that is manifest in varying degrees in every person based on individual flexibility, inner strength and environmental and social factors.

Zautra and his colleagues at the Resilience Solutions Group go on to note that the recovery definition is inherently reactive and focused on healing after an injurious event, conversely, the sustainability definition considers the ability of a person to move forward based on the assumption that perseverance toward engagement and purpose is the natural inclination of human life and so moving forward is a return to homeostasis. (Zautra et al., 2008.)

By considering resilience through a positive (sustainability) rather than a risk based (recovery) framework, Zautra posits, those designing resilience based interventions will be able to achieve a greater understanding of community and individual capital resulting in a fuller development of existing personal and community resources. (Zautra et al, 2008). He points to a shift away from exclusively therapeutic methods

toward alternatives like coaching, workshops and mindfulness as potential interventions within a resilience framework.

Prescott, Sekunder, Baily and Hoshino's also follow a positivist, workshop approach in their work to encourage resiliency in homeless youth in Seattle. As social workers and art therapists, the research team wanted to approach the problem of homelessness from a positive, strength based perspective rather than the established damage, pathology-focused model that prevails in the United States.

Creative Exploration & Expression as a means of Fostering Resilience

Creativity is widely recognized to encourage self realization, promote independent thinking, and enhance self esteem – all important aspects of resilience (Jindal Snape et al., 2013.; Prescott et al., 2008.; Macpherson, Hart & Heaver, 2013.). Creativity is also seen as an outcome of resilience (Di Caroli & Sagone, 2014.) and it is my belief that engagement in creative work, an exploration of various media, tools and projects and the celebration of that work, also play an important role in fostering resilience in those who may be facing adversity. Further, it is my belief that technology affords us a new and unique opportunity to engage with youth.

This position is supported by the work of Prescott, et al. who developed a workshop for homeless youth based on the same supposition. They created an intervention that

saw over 600 teens participate visit a drop-in art centre over two years. The team gathered quantitative data from over 200 participants who visited the centre at least 4 times and found that “ individuals who attended the art centre more regularly had a significantly higher number of life achievements.” (Prescott, Sekunder, Bailey, Hoshino, 2008.) Achievements were hallmarks of resiliency and included returning to school, finding housing, finding a job and quitting their addictions.

Within these definitions live a variety of approaches in the consideration of resilience; these include attachment, challenge, risk protective and compensatory, among others. I believe a clear understanding of the nature of resilience has been important in developing the workshops so that they encourage trust while also facilitating growth and positive development.

Each approach takes a different perspective on the development of the qualities of resilience. The Create & Grow Strong workshops are borne out of an alignment with the compensatory and challenge resiliency perspectives outlined by Zautra and his team (Zautra, et al, 2008.). The former states that risk and protective factors have additive effects, that, for example, a negative event could cause depression but a strong social network or positive views could mitigate the longer term impacts of that event. The challenge theory suggests that a moderate amount of risk is necessary to enhance the protective factors of a better adjusted individual.

The workshops do not attempt to create conditions of risk but rather, they seek to establish a relaxed trust environment that see youth losing themselves in the creative experience as an escape from risk. This allows them to discuss or come to terms with conditions in their lives that may be affecting their general wellbeing, confidence, hopefulness etc. The goal is to provide a space for exploration and creative growth that nurtures Winnicott's 'potential place' - one that is neither internal (inner world) nor strictly external (reality based) but encourages play, in it's universal form, which facilitates growth and health, leads to group relationships and may serve as a form of communication (Winnicott, 1971.).

Across all of the cited literature there is a recognition that in order to create programs that effectively nurture resiliency there must be a strength-based, integrated or holistic approach both to modeling the health of individuals and also to the generation of research and interventions that serve to benefit people and their communities. (Zautra et al, 2008, Halata, 2011, Prescott, Sekunder, Bailey, Hoshino, 2008., Coholic et al., 2012)

Andrew Halata suggests there is the need for increased focus on the qualitative outcomes and the impact on patients as illustrated by their individual narratives (Halata, 2011.). In his 2011 work, *Resilience and Healing Amidst Depressive Experiences: An Emerging Four-Factor Model from Emic/Etic Perspectives*, Halata suggests that the

emic, or qualitative research model, is significantly underrepresented in the field of resiliency research.

He notes that this has led to an approach that is too limited, that the failure to consider resiliency as a lived phenomenon is one that leaves important complexity and intricacies unexplored in past research (Halata, 2011.). Halata goes on to cite Dunn, Uswatte and Elliott's 2009 study, which found that: "emphasis on a person-centered or qualitative approach is crucial for future studies".

In this vein Prescott also collected qualitative data from three youth participants in the art centre program. The results revealed common themes of exploration and growth, the role of art, making connections and experiential knowledge and resulted in the recreation of Wolin and Wolin's mandala of resiliency (Wolin and Wolin, 1993.) to better reflect the importance of creativity in fostering resilience.

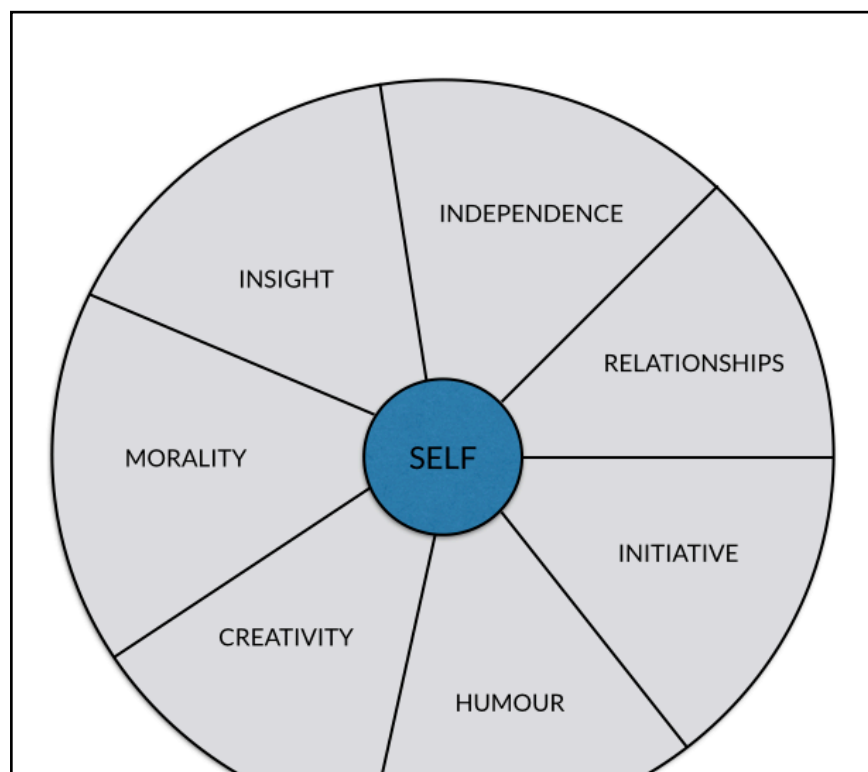


Figure 3: Wolin & Wolin's Mandala of Resiliency (1993)

This new “Creativity at Every Turn” mandala clearly illustrates the importance of creativity to the development of resilience within an art therapy context. Prescott notes that the mandala is fluid with the self at the centre, as with Wolin & Wolin’s original wheel but that the researchers created additional rings to suggest the interaction of Wolin & Wolin’s aspects with a variety of importance resiliency resources and skill sets.

Prescott further suggests that “creativity permeates all themes on the mandala because creativity provides a holding environment for resiliency; it encourages resiliency in it’s own right as well as facilitating other resiliency strengths.” (Prescott et al., 2011.)

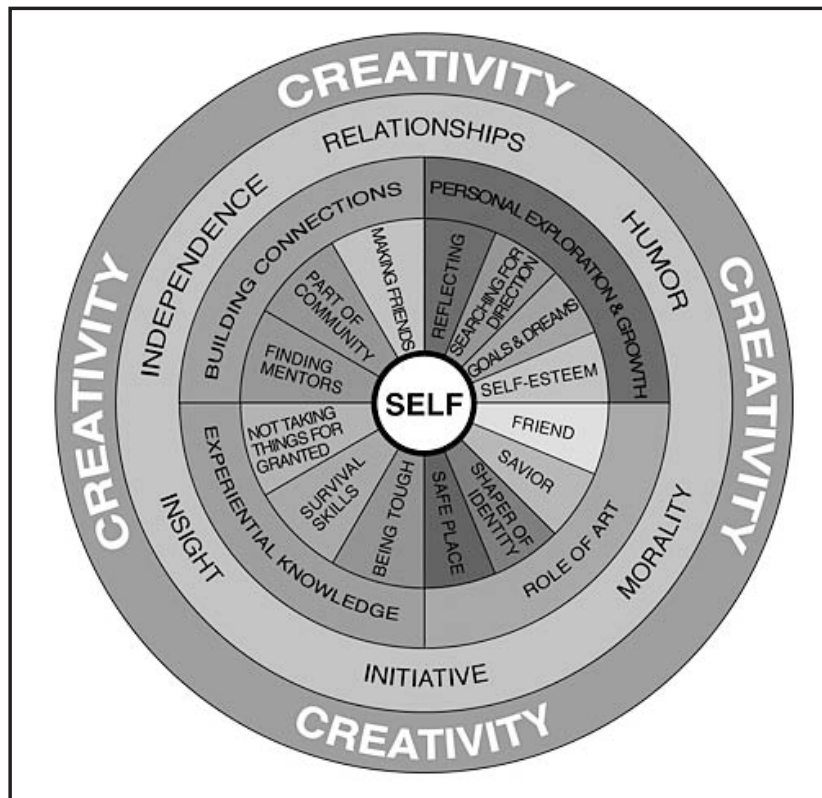


Figure 4: Prescott et al.'s "Creativity at Every Turn" Mandala

This meshes well with Winnicott's suggestion that play and creativity are valuable means of self-discovery (Winnicott, 1971.) and supports his theory that trust-based relaxation in a creative environment is key to creating a "potential place" where this type of expression and exploration from a sense of self can thrive.

The Research

In developing the Create & Grow Strong Workshops it was my aim to craft an environment conducive to resilience building experiences, adapting them appropriately based on participant feedback and researching them using praxis,

reflective practice and grounded theory to assess the qualitative outcomes of the series.

By structuring the workshops around a weekly theme and curriculum (see Appendix 2) I was able to focus on task oriented goals related to the final showcase while remaining flexible enough to adapt to the needs and feedback of participants. This adaptability was particularly important to the effective use of praxis, reflective practice and grounded theory.

Praxis: Translating Theory into Practice

The word praxis was first used by Aristotle in contrast to *poiesis* (goal oriented action) and *theoria* (the production of truth), The philosopher used it to describe an action that is an end in itself with the goal being a morally worthwhile good (Teirney and Salee, 2008.).

To me, praxis is more than just practicing informed by theoretical considerations, it is the marriage of the two in order to create an informed and specific process that in my research has the intention of involving a marginalized community. This is consistent with the later definition of praxis as outlined by Friere who describes praxis as “reflection and action upon the world in order to transform it.” (Friere, 2000.).

A key aspect of my praxis-based research approach is a collaboration with community through dialogue, reflexivity based on critical thinking and participation. There is recognition in the field that the researcher and participants learn from one another in a reciprocal way and achieve growth through both data collection and reflection. For that reason trust is an important factor in the success of a project (Tierney and Salee, 2008).

This approach resonates deeply with my own beliefs and is reflected in the delivery of the Create & Grow Strong Workshops. In an attempt to affect change and to help improve the quality of life of youth in a community, I drew from my own life experiences and focused on creativity as a means to fostering resilience.

It has been my experience that engaging with the creative process in a meaningful way impacts all areas of life and identity (allowing for the understanding of one's inner world and also the expression of it externally) and individual reactions to external events, in a deep and unique manner. This expression can be empowering, hopeful and cathartic to say the least and life changing when it's felt most profoundly. By giving participants a chance to voice their opinions and influence the structure of the workshops it adds another layer of engagement and another layer of creativity, valuing their perspective and their contribution to the ongoing process of developing the series.

This type of experience-based, qualitative feedback is also well suited to assessing resilience within Ungar's proposed frameworks. In his 2006 work, *Nurturing Hidden Resilience in At-Risk Youth in Different Cultures*, Ungar advocates a grounded theory approach to analysis and outlines 7 tensions that should be resolved if one wants to provide an experience of positive growth for youth participating in a resilience

Tension	Explanation
1. Access to material resources	<ul style="list-style-type: none"> Availability of financial, educational, medical and employment assistance and/or opportunities, as well as access to food, clothing and shelter
2. Relationships	<ul style="list-style-type: none"> Relationships with significant others, peers and adults within one's family and community
3. Identity	<ul style="list-style-type: none"> Personal and collective sense of purpose, self-appraisal of strengths and weaknesses, aspirations, beliefs and values, including spiritual and religious identification
4. Power and control	<ul style="list-style-type: none"> Experiences of caring for one's self and others; the ability to affect change in one's social and physical environment in order to access health resources
5. Cultural adherence	<ul style="list-style-type: none"> Adherence to one's local and/or global cultural practices, values and beliefs
6. Social justice	<ul style="list-style-type: none"> Experiences related to finding a meaningful role in community and social equality
7. Cohesion	<ul style="list-style-type: none"> Balancing one's personal interests with a sense of responsibility to the greater good; feeling a part of something larger than one's self socially and spiritually

initiative.

Table 1: Ungar's 7 Tensions *Nurturing Hidden Resilience in At-Risk Youth in Different Cultures*. (2006)

He further stresses that the consideration of different contextual specificities is key to creating meaningful programs, summing it up as follows:

“The constellation of factors that interact in the lives of resilient children have been shown to be complex in their association. There must necessarily be appreciation

*shown for both the heterogeneity and homogeneity
in coping across populations.”*

- Ungar (2006).

This is consistent with the tenets of the praxis-based research I intended to use. The research for this thesis pertains to the youth of Toronto's Regent Park neighbourhood, a low-income, immigrant community that has a reputation for crime and violence. The pilot program for the workshops took place at Regent Park Focus Youth Media Arts Centre (Focus), a not-for-profit community media lab with its own radio and television stations that encourages participatory media practices as a means to build and sustain a healthy community in Regent Park.

Location

Regent Park is currently in the middle of a widespread, government initiated revitalization process that has seen many large residential apartment buildings torn down to make way for new development. In many cases residents, 85% of whom lived in apartments, have been relocated to new communities in various areas of the city. (National Household Survey, Statistics Canada, 2011.)

Nearly 40% of the population of Regent Park is between the ages of 0 and 18. There are two large primary schools in the area and one large high school, but many youth attend high school elsewhere in the city. Visible minorities make up 75% of residents, with immigrants from Bangladesh comprising the majority of the people living in Regent Park in 2011 (Statistics Canada, 2011.). All of these factors impacted the

program and were incorporated into the series as part of the praxis-based, iterative design approach

As a means of assessing changes in resilience I employed Liebenberg, Ungar's CYRM-28 questionnaires (Liebenberg & Ungar, 2012.). Piloted with over a thousand children in 11 countries around the world, the measure consists of 28 clear questions that represent an adaptive, cross-cultural tool that measures the resources available to participants.

One section of the questionnaire is built in concert with community representatives. In the case of this iteration of Create & Grow Strong I developed the questions with the on site community worker at Focus, Pat Whittaker. Upon reflection I believe I could have better introduced the CYRM tool and its purpose, however, the questions we came to represented concerns ranging from media representation, choice making, bullying to safety, general happiness and self respect and esteem.

Hypothesis

It is my hypothesis that:

by undertaking a creative and contextually relevant project that develops skills, in a group setting, youth begin to cultivate traits that contribute to increased resilience elsewhere in life.

These traits, drawn from Ungar, Dumond and McDonald's *Risk, Resilience and Outdoor Programmes for At-Risk Children* (2005), are outlined in tables 2 & 3.

In developing Create & Grow Strong I focused primarily on nurturing a few from the individual and interpersonal attributes including self-esteem, competence, sense of humour/creativity, goals and aspirations, initiative and planning, perseverance, constructive use of time, interpersonal planning and problem solving skills and self-awareness or insight.

Individual attributes
<p>Competence (intellectual, physical), past and present</p> <p>Self-efficacy, internality</p> <p>Positive self-concept/self-esteem</p> <p>Self-awareness or insight</p> <p>Sense of humour/creativity</p> <p>Positive outlook/optimism/hopefulness</p> <p>Goals and aspirations/personal mission</p> <p>Problem-solving ability</p> <p>Healthy sexual identity</p> <p>Initiative and planning</p> <p>Perseverance</p> <p>Empathy for others</p> <p>Emotionally expressive</p> <p>Autonomy and independence or dependency (as appropriate to situation)</p> <p>Morality</p> <p>Spirituality</p> <p>Constructive use of time</p>
Interpersonal attributes
<p>Meaningful relationships with others/social bonding</p> <p>Maintains a network of school, home, community and peer associations</p> <p>Emotional management in stressful situations</p> <p>Social competence (understands what motivates others, how to act appropriately, etc.)</p> <p>Assertiveness, resistance to negative and controlling behaviours by others</p> <p>Capacity to restore self-esteem when threatened by others</p> <p>Interpersonal planning skills</p> <p>Interpersonal problem-solving skills</p> <p>Evoking personality, engages with others, elicits positive attention</p>
Family attributes
<p>Parents monitor the children in age-appropriate ways</p> <p>Quality of parenting</p> <p>Financial resources sufficient to meet family's needs and social expectations</p> <p>Avoidance of dangerous or threatening family interactions</p> <p>Family emotional expressiveness</p> <p>Collaborative family problem-solving</p> <p>Flexibility</p> <p>Low level of family conflict</p>
<i>continued</i>

Table 2: Characteristics of Resilient Children & Youth (Ungar et al., 2005).

General characteristics of the environment beyond the family (including peers, school, community)

Availability of mentor to provide guidance when needed
 Access to community resources and relationships that counter the effects of risk
 Maintaining proximity to safe environments
 Keeping distance from dangerous and stigmatizing environments
 Perceived social support
 Affiliation with a religious organization, spiritual supports
 Appropriate use or abstinence from substance use/abuse
 Community expectations for success
 Access to school and/or a learning community
 Access to recreation opportunities
 Safety and security
 Academic opportunities to excel
 Age-appropriate vocational opportunities
 Meaningful role in community
 Time for reflection and renewal

Social and cultural context

High social status (based on wealth or position)
 Economic stability of the family
 Meaningful rites of passage that include manageable levels of risk
 A relational world view, emphasizing coherence, unity, place
 Perception of events as either stressors or normative events as is appropriate to community norms

Table 3: Continued- Characteristics of Resilient Children & Youth (Ungar et al, 2005.)

The Workshops

This first iteration of the Create and Grow Strong series consisted of 6 two hour sessions spanning 8 weeks from November 1 to December 18, 2014 at Focus in downtown Toronto. In week 6, it expanded to include a Skype based coding session as

the group had fallen behind. Session 6 also expanded to be three hours in preparation for the final showcase on December 18, 2014.

The group included three teenagers. They have all lived in the Regent Park area with their families for most of their lives. At the outset each was tasked with choosing their own code name for the purposes of this research.



Figure 5: Session 3 – Creating. Youth actively describe the features of a park that they hang out in in the neighbourhood.

Break Free is a 14-year-old male of Bengali Muslim descent. He attends mosque regularly and lives with both parents and siblings in housing that has not yet felt the

benefits of the revitalization project. He is smart, creative and particularly interested in poetry classes that he participates in outside of school but expressed frustration at being bullied. He attends high school outside of Regent Park.

Ayabar Nahk is a 15-year-old female of Bengali Muslim descent. She also attends a local mosque and lives with both parents and two younger siblings. Her family was relocated within Regent Park to a smaller building as a result of the revitalization. She is very outgoing, empathetic and artistic and was consistently excited to engage with different aspects of the program. She attends a different high school, also outside of Regent Park.

Jub Jub Exo is a 14-year-old female of Vietnamese descent. She lives with her mother in a new building in Regent Park, having been relocated when the building she and Ayabar Nahk grew up was torn down. Highly motivated and curious, Jub Jub was particularly interested in the coding aspects of the program and often spoke about other “maker” projects she was participating in. She attends the same high school as Ayabar Nahk and has also spoken about being bullied by her peers.

With each participant in mind I again considered Winnicott’s play theory and attempted to create a “potential place” that would allow participants to engage in creativity and experience relaxation based on trust. As the facilitator I attempted to encourage the creative impulse and self-exploration by reflecting back participant

observations (Winnicott, 1971.) as they were made and by asking questions that would encourage youth to delve deeper into their assumptions and those of the community and city around them.

Each week had a different theme that was intended to establish a trusting and relaxed environment in which I was leading the workshop but was more a peer than a teacher or authority. Participants were treated with respect and their input was valued as were their opinions and questions throughout the program.

This is consistent with the work of development and education theorist Alison Gopnik. Gopnik outlines the need for respect of children and youth very clearly saying: "Children aren't just defective adults, primitive grownups gradually attaining our perfection and complexity. Instead, children and adults are different forms of homo sapiens. They have very different, though equally complex and powerful, minds, brains, and forms of consciousness, designed to serve different evolutionary functions". (Gopnik, 2009)

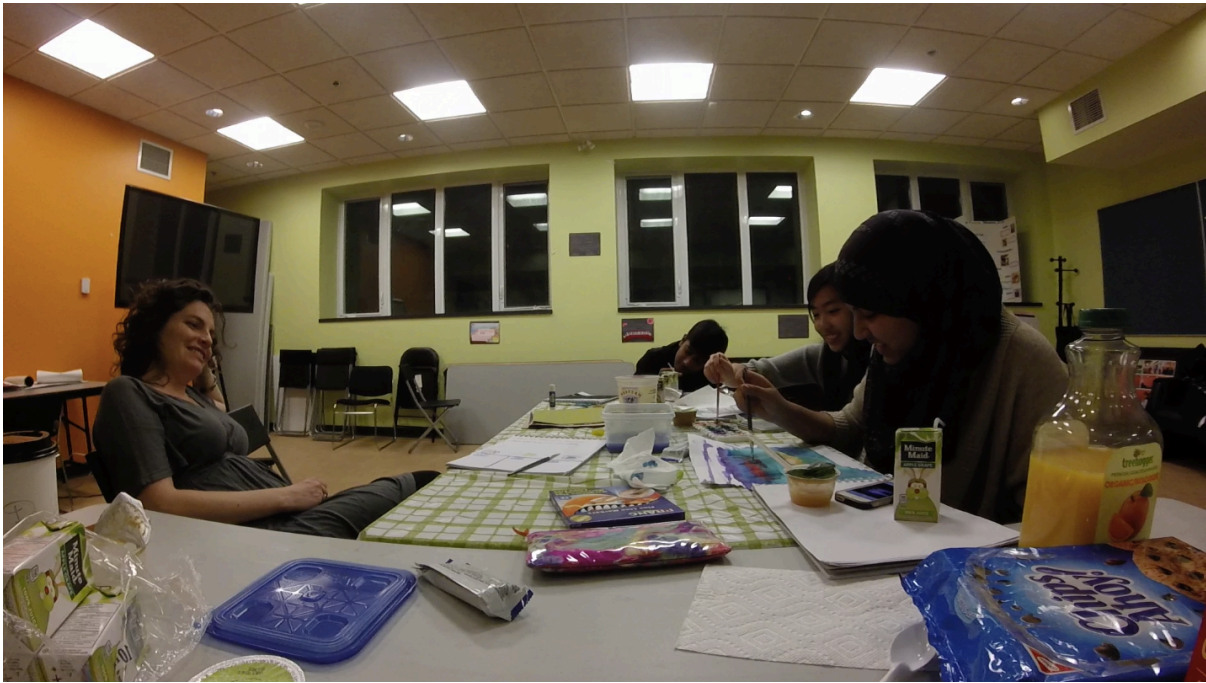


Figure 6: Session 4 - Refining. Youth use various media as they make final preparations of their physical prototypes ahead of digital translation.

It is my belief that mutual respect and clear intention to learn from one another is imperative in making workshops with children and youth, especially those who face stigma as a result of their context, a success.

Reflective Practice: Review of Jason Bruges Studio Project

Halfway through the workshop program I travelled to London, UK to spend a week in the studio of Jason Bruges, designer of large-scale digital interventions in urban spaces. He and his team have worked around the world with institutional, private and

corporate clients and engage in consultation with stakeholders and communities to determine the needs and priorities that will inform the projects.

In considering my time at Jason Bruges Studio as part of my reflective practice I made use of the Rolfe Model of Reflective Practice (Rolfe et al., 2001.) which encourages the researcher to ask the questions: What? So what? And Now what?

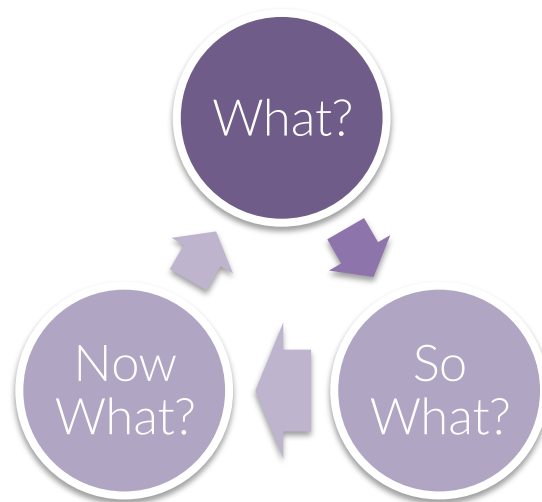


Figure 7: Reflective Model (Rolfe et al., 2001.)

I deemed it an appropriate model because it allowed me to reflect on the experience as what it was and also for me to consider how to best take my lessons and adapt them for a different application and to concretely learn from the experience I had in studio with Jason and his colleagues.

What?

As part of the team I assisted with concept design for a playground to be located in the courtyard of a major British children's hospital. Throughout the experience I considered developmental stages, accessibility concerns and the needs of the hospital, its patients and their families. All of this was informed by the goal of providing a calm, fun environment that incorporated digital technologies into an outdoor, physical play space.

So What?

Though not directly related to the workshops, the experience encouraged me to delve more deeply into the development process of children and youth. A big part of my contribution to the concept stage was to create a design guidebook for the project outlining considerations for each age group while also touching on inclusive design principles and keeping in mind the limitations put in place by the setting of the playground.

Now What?

Upon my return I was more aware of the uniqueness of the teen years and when working with the participants who were fourteen and fifteen years old I was able to keep them in mind. Most relevant was the understanding that teenagers, especially young teens, are coming of age. They are grappling with identity and autonomy while

dealing with the uncertainty of their social lives and their place within family, community and friend groups.

Teenagers are learning about the world as they learn about themselves and, in the case of participants in Regent Park, are also confronting very adult issues of displacement, parental and social expectations, community overhaul, sexual and physical abuse in schools and bullying. All of this creates a storm within them and realizing this made it all the more important that the Create & Grow Strong space be one of respite, respect, calm and conversation. Throughout the creative sessions we unpacked their feelings about school, violence, bullying and the ongoing revitalization in Regent Park.

Participants expressed themselves very clearly, each contributing well-reasoned points and asking meaningful questions. The workshop was developed with the revitalization in mind and it was successful in investigating the implications of the resulting changes for these three young residents and their lives.

Grounded Theory: Lessons from 38 Regent Street

Grounded Theory is a means of systematically generating a theory that is grounded in either quantitative or qualitative data often based on observation, conversation or public or private record (Scott, 2009.) I chose grounded theory as my third research

method because I felt it meshed well with the praxis and reflective practice methods and qualitative information gathering, while allowing for flexibility of developing my hypothesis as the work progressed.

My initial hypothesis: that exploring, engaging in and celebrating creative work can help to foster resilience in youth; it turned out, was insufficient and as I engaged in deep surveys of existing literature and studies it became clear that it had already been proven by a number of researchers. This revelation was all the more important as I spoke with my thesis adviser, Tom Barker and considered what the workshops asked of the participants, the goals it achieved from their perspective and what new knowledge it brought to this area of research.

As a result I worked to develop a theory to inform future workshops by drawing on the feedback from youth and my own reflections of working with them throughout the series.

Some aspects the initial hypothesis missed out on that were identified through this reflection were, for example, the hypothesis did not account for the group aspect, the translation of physical into digital, the acquisition of useful skills, the length of sessions, the value of snacks, the importance of conversation, the key practice of mutual respect and the involvement of youth in shaping the projects and the research with their feedback (obtained through reflection, surveys and questionnaires).

Mutual Respect

The first piece of feedback I received from Jub Jub Exo following the second information session was that I was “chill”. She said she liked that I talked to her like a real person and her friend “not like a teacher”. I maintained this approach throughout, treating participants as younger but respected peers with valuable insights to share and talents to be prized. I believe this was essential to the success of the project.

Conversation

Conversation was a big part of the Create & Grow Strong workshops. Not only was it essential to the collaborative learning process that I was trying to encourage but it was also a big part of the resiliency building aspect. In the second session we walked around the Regent Park area considering the revitalization and the changes taking place in the neighbourhood where all three participants were raised. It became clear that even though this was a big change that they were experiencing they had not been given much of an opportunity to discuss the tearing down of the buildings they grew up in and the destruction of the parks and gardens that they called home for most of their childhoods.

This discussion also gave way to conversations about bullying, violence and sexual abuse that they'd heard about or fallen victim to at school. In fact, when asked about their experience of the workshops in a follow up questionnaire two of the three participants referred to these discussions:

“My favourite part was when we talked about the revitalization and when we walked around Regent Park. It felt good to say how I feel.”

- Abayar Nahk

“[Create & Grow Strong] made me think more about the revitalization of Regent Park and how it affected me. This project made me express how I felt about the revitalization.”

- Jub Jub Exo

Group Learning & Collaboration

Throughout the workshop period there were a number of opportunities for participants to work together and share resources as they developed their projects. Each teen had their own unique strengths that they brought to the project, for example, Break Free showed a natural understanding of the symbolic and metaphorical which came through in his choice of alias, project work and questionnaires and when engaging in group discussion.

In the very first workshop when participants were asked to collage a sketchbook cover with their feelings about what it is to be creative Break Free created a collage of many different shades of reds, blues, greys and purples described this as illustrating creativity. (see Figure 8).



Figure 8: Session 2 – Understanding. Break Free talking through his sketchbook collage and his interpretation of creativity

He went on to describe his future plan to add wings, one side representing an angel wing with each feather being a different colour and the other a black devil wing. He said this would show that creativity is not always good. He intended to top the wings with a crown that represents his signature. This expression of metaphor was also displayed in his final comment about the workshops was that he learned:

“That working on creativity can help one explore the mind.”
- Break Free

Jub Jub Exo was enrolled in a variety of different coding and digital courses at the time of the workshops. As a result she frequently asked great clarifying questions and helped to explain concepts to the other teens. She was a huge help and her

excitement about coding added valuable energy when people were getting frustrated or discouraged.

Ayabar Nahk is a talented artist and she is also very open and empathetic. Her readiness to express her feelings and to experiment with different media encouraged others to take risks and to open up about their own experiences of school and life in Regent Park. She was also very committed to the program, creating detailed drawings at home to bring in and collecting a variety of images online to incorporate characters from her favourite films and television shows.

At points the collaboration was strong, sharing cameras when roaming the neighbourhood, sharing materials and ideas when making their physical prototypes or puzzling through code together, but more often it was displayed as they spoke about their experiences with bullying, change and violence and supported each other with kindness, understanding and humour.

Translation of physical into digital

The process of translating physical into digital was one of great importance. A stand out compared to other research oriented toward creativity and resilience, the process of experimenting with different media, engaging in tactile practices like collage, painting, photography and drawing was then paired with the learning and application of coding skills. They planned and executed their projects as part of a step-

by-step process, which not only provided clear weekly goals but seemed to enhance their excitement for their next week. In fact, every week when asked about how they were feeling and what they were looking forward to the following session they responded positively – saying they were sad this session was ending but excited to return the following week to learn a new skill, finish a step or otherwise work toward the completion of the project.

Skills Acquisition

Skills acquisition was also a very important part of the workshop. Throughout our time together the participants remarked often on the value of the experience and how excited they were to include the workshop on their application for universities. Both Abayar Nahk and Jub Jub Exo consistently expressed interest in working with me on future iterations of the program and were excited to get the business card of a digital design firm at the final showcase. For both of them the skills they acquired were building blocks for a stronger future and one that brought independence and pride that was rooted in the greatness of their minds and skills.

Length of Sessions

This pilot of the program included 6 two-hour sessions every Saturday afternoon. Through the execution of the project and based off of feedback from participants it became clear that this was not ideal for a number of reasons. Primarily, two hours is not a long enough session. It does not provide enough time for participants to:

- a) be a bit late – a practice which was pretty standard throughout
- b) have time to relax into the session through a group dance off or meditation
- c) listen to and understand instructions for the days tasks and how they fit in to the overall program
- d) complete the daily project while also allowing for tangential conversations
- e) allow them to complete work calmly and without rushing or having to take parts home to finish

Though the workshops went well, we did have to adapt the schedule to include a 7th session via Skype and extend the final session to be three hours long. This still wasn't enough to have everyone's work finished as Break Free had to miss a session due to illness. Each participant commented on the length of sessions and expressed interest in staying later or starting earlier however the scheduling limitations of the Focus facility made this impossible.

Saturday sessions were also limiting; drawing interest from teenagers to spend a weekend afternoon inside in an organized activity is difficult and even attracting them to the Saturday info session proved challenging. Fortunately Break Free, Abayar Nahk and Jub Jub Exo were already engaged in programming at Focus and happened upon the info session by chance and were interested in taking part.

Snacks!

It was surprising how important snacks were to the participants. Break Free mentioned snacks in almost every one of his questionnaire responses, both as a positive if they were present and as a negative if they were not. Ayabar Nahk referred to them as being a favourite aspect as well. The first instance of snacks was during the first workshop, following Halloween, when I brought in candy leftover from shell outing. Over the weeks we celebrated a birthday and I sometimes was unable to bring treats but for the most part I worked to bring healthy snacks like juice boxes, fruit and granola bars or apple sauce. All of these were warmly appreciated and ravenously consumed making it seem as though the kids were quite hungry. It was difficult to tell if their focus improved after eating as the sessions were only two hours long and the snacks typically came out toward the end of the first hour, that said, their inclusion certainly made for a happier, more engaged group.

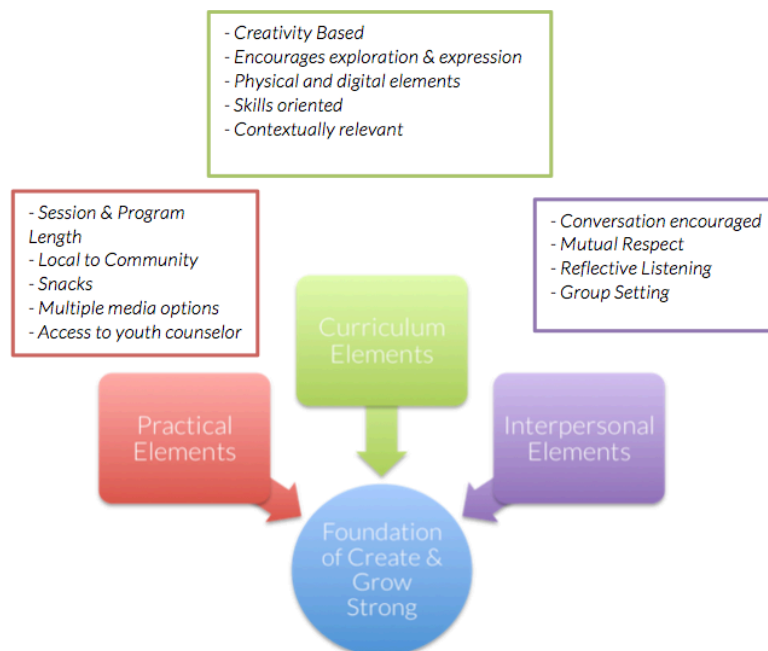
Participant Role in Shaping Research

From the outset participants were treated as partners in the generation of this research. At the first information session and at points during each session I emphasized that though I was leading the workshop to teach them skills and engage them in fun, creative work I was also there to learn from them both about their lives and also how to make the workshop program better for future groups. I made clear that their opinions and feedback were important to the success of the work and that their criticism was just as important as their compliments when they answered

surveys at the end of each session. I believe this emphasis was very important. It made clear that their feelings and were valuable and that they occupied an important place within the life of Create & Grow Strong, both as a study and as an ongoing program that could help others in the future. It is my belief that empowering these participants through a feeling of shared ownership was as important to the positive outcomes as the generation of the creative work.

Theoretical Outcomes

The theory that has emerged as a result of the workshop pilot and this thesis is outlined in the diagram below.



My revised workshop development theory, therefore, is that there are three important areas of concern to be addressed when developing a creativity workshop with the goal of encouraging the development of traits characteristic of resiliency in youth. These areas should be considered equally as part of a qualitative, holistic, process-based approach to the development, delivery and subsequent redevelopment of programs as they are modified to meet the needs of each community served.

By focusing on practical, curriculum-based and interpersonal elements while building and executing a creativity workshop one creates an environment that is likely to encourage creativity that springs from a relaxed place and encourages confidence, hopefulness and self-reflection consistent with Winnicott's "potential place" (Winnicott, 1971.) and also with Halata's guidelines for creating interventions that encourage resilience (Halata, 2011.).

The Technology

The technology behind Create & Grow Strong uses processing, projection and Bluetooth to translate drawings and photographs into interactive digital environments.

Design Intent

Mantra: Enable Creation & Confidence in Context

My intention for the design of the overall program was to create a space where youth would feel confident and competent enough to take creative risks and nurture the traits of resilience. The role of technology in the workshop was intended to facilitate all of this rather than to be the main driver of the program. I wanted to use software to introduce youth to a new skill in a way that would spark curiosity about coding and other technology and to integrate it with the creation of a physical work that would allow them to explore different means of tactile creation via a variety of media options. Through out all of this the local context and community were to be the thread that connected the different elements and the final technological piece was to be the outcome to be showcased and celebrated.

There are a number of appropriate development tools available however I focused in on processing in the end and am confident that it was the right choice and remains the best option for the early iterations of Create & Grow Strong workshops.

Survey of Software Tools

Processing

Processing is the tool that I used to build the prototype that inspired this work. It's language, based off of java, is clear, straightforward and easy to learn and get started

with. Processing is also a free platform that is readily available to anyone with an Internet connection. It is specifically geared at artists and designers, which also makes it an attractive option in the context of a creativity based workshop setting.

Unity

Unity is an incredible system with virtually limitless capabilities. It is used in professional film, television and video game design and has a free trial version that is downloadable online. Unfortunately, Unity is very complex. As I tried to learn Unity it became clear to me that it was a seemingly endless process and that a platform with such depth was unnecessary for this project and, to be frank, quite intimidating for one coming to it as a beginner with a specific project in mind. Perhaps Unity will be the right software for Create & Grow Strong one day but certainly not this time around.

GameMaker

GameMaker is a program that makes it easy for anyone to get started building games. It has an extensive online library of help resources and forums and allows for sprites and other 2D elements to be used alongside 3D building capability. In working with GameMaker I found it to be a strong tool for game development but I was unable to take it past the limited application of a platformer type game. The drag and drop interface was useful but I wasn't able to harness the coding interface. Though it was impractical to switch to Game Maker for this iteration of the workshops I would consider doing so in the future as it is a platform specifically oriented toward gaming, something very appealing for participants, and it likely has greater potential when

considering possible reactions and interactions. Though I know that integrating physical work in to the digital environment as a background is possible in Game Maker I have not yet had the opportunity to investigate how one would incorporate the reactions now facilitated by colourUnderMouse coding.

Development

The design development for the technology behind Create & Grow Strong began in October 2013 as part of our course work using processing and computer vision. In it's original form as *Projector Puppetry* the prototype used fiducial markers paired with reactiVision and processing software, a projector and the camera on a macbook air. The result was a great first step but fiducial markers are notoriously unstable and any variation in angle would hinder the ability of the camera to pick up the marker. This made it impractical, particularly for use with children or those who have limited mobility, as was the original intention for this project.

The second phase began in the spring of 2014 at which time I began an in depth investigation into the possibility of using infrared sensors to control the character on the screen. As I delved deeper into possibilities, and broke a number of webcams trying to create an IR camera I came across the noIR camera attachment for Raspberry Pi. It seemed like a dream come true. Building the system to work on a Raspberry Pi would mean a small, inexpensive, accessible hardware solution that is

easily programmed and available around the world should it be possible to scale the workshop up to serve international or more remote communities.

As soon as I cottoned on to this idea I dove head first into Raspberry Pi, leaving behind all other avenues of investigation. This was a big risk and a big failure. The Raspberry Pi is a fine small computer with a good operating system however it has nowhere near enough power at this point to host and run Processing programs. Unfortunately it took me almost a month of tinkering, learning linux, buying parts and reformatting boards to come to this conclusion.

Though the experiment was failed it was a worthwhile exercise and prompted me to consider whether Processing was the best platform. It was also great evidence of the value of getting technology working as its simplest workable form and then moving forward in step-by-step increments to make improvements and add features. Adding to a stable, working platform makes far more sense than focusing on complicated features that won't matter if you can't get the most basic aspects up and running. Coding examples of each prototype stage can be found in the appendices.

Prototype 1: A house, sun and flowers

The first working prototype was based around a very plain sheet drawn in Processing that allowed me to build shapes and plot them on the canvas.

This gave me a sense of the best size and also the most effective means of plotting areas for mapping at a later time. It was my intention to assign certain interactions to plotted areas of the screen, for example, if cursor is over the house (drawn and mapped in drawHouse) then it will change colour.

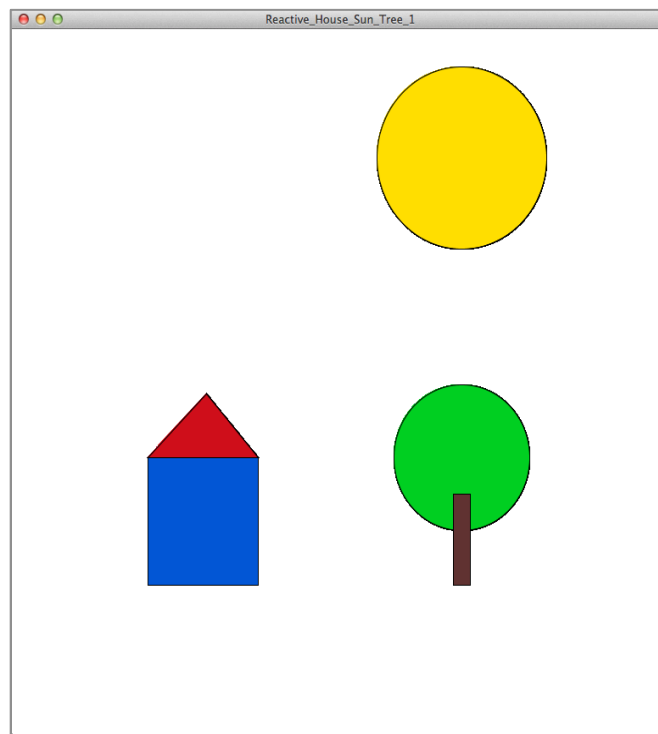


Figure 10: Prototype 1 - Canvas with no reaction

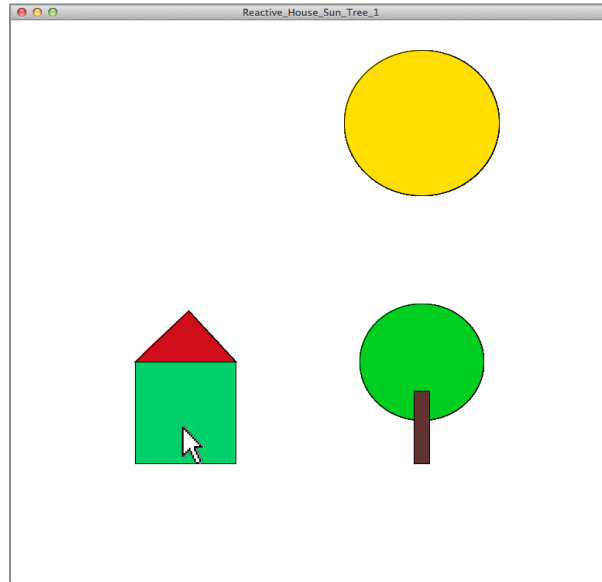


Figure 11: Prototype 1 – Canvas with reaction

As you can see from the example in figures 10 and 11 colour change worked, changing the body of the house from blue to green. The tree and sun also changed colour based on the code. It was a satisfactory first experiment and one that I then hoped to translate into more complex interactions, integrating images not drawn in processing.

Prototype 2: colorUnderMouse

As I developed the next prototype I sought to include imported .jpg images as the characters and landscapes that would comprise the scene. I continued to use the mapping technique but attempted to isolate specific parts of the imported image. This was ultimately unsuccessful. Fortunately I had a meeting with my adviser Nick Puckett who introduced me to `colorUnderMouse`, a line of code that calls on the

mouse to read the colour signature of the image it passes over. In the case of this piece the image is hidden beneath the jpg and made up of colour blocked portions, as it discovers the code it calls up the reaction.

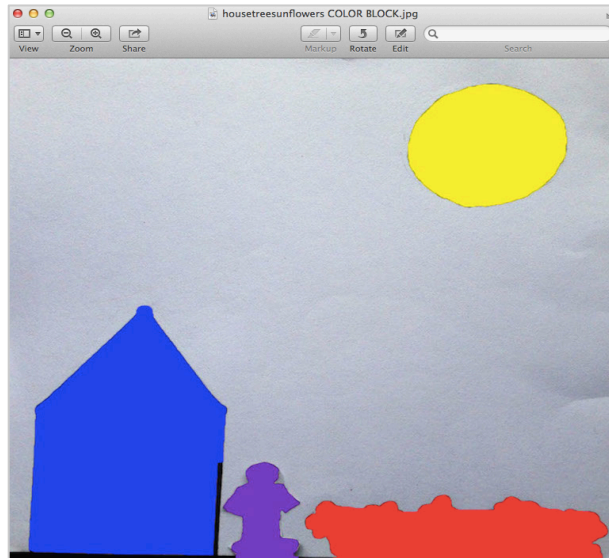


Figure 12: Prototype 2 – Hidden Landscape with Colour Blocking

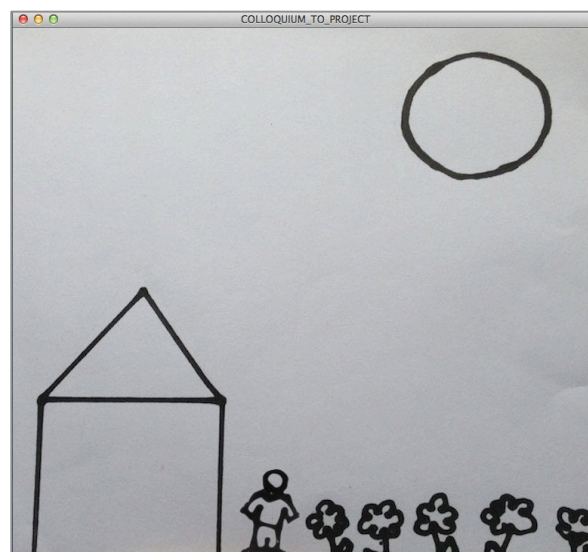


Figure 13: Prototype 2 - Visible Template

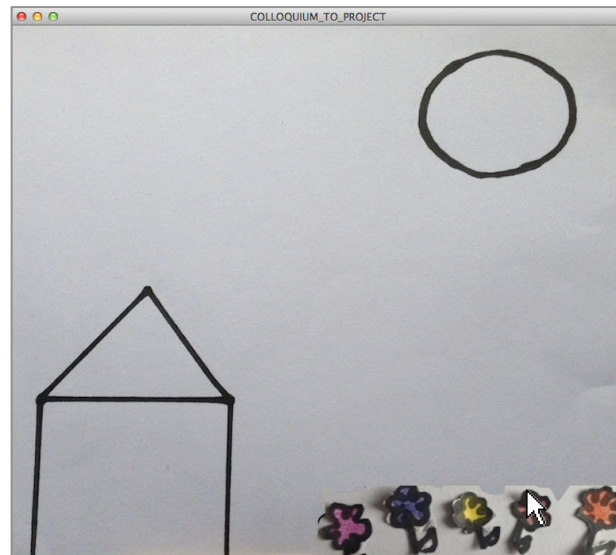


Figure 14: Prototype 2 - Responsive Flowers

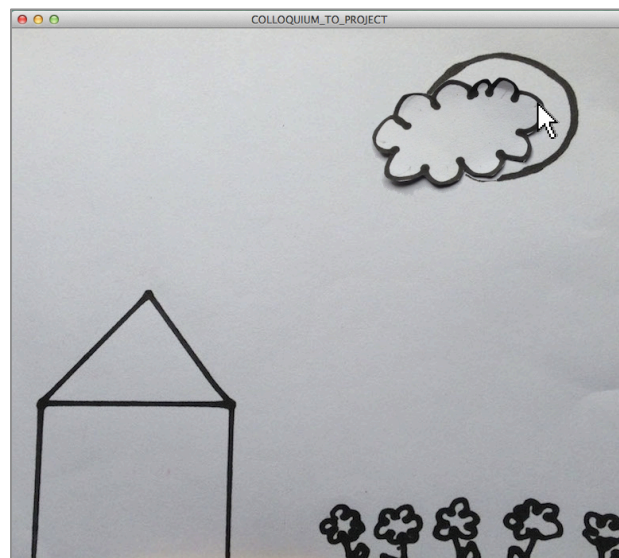


Figure 15: Prototype 2 - Responsive Sun

Prototypes 3, 4 & 5: Interaction Variety

After this was established and working soundly I began considering interactions that were more complex than simply images appearing over top of the visible

environment. As a first iteration of the project there were timing limitations on what could be included before the participants needed to have firm options so I decided to focus on three additional responses that could be used in a variety of ways. As it turned out, participants only really latched on to the audio and multiple image options but I have no doubt that as the possibilities grow there will be new and interesting ways for them to be incorporated. The two responses I included were audio and moving reactions as well as initiating a number of images simultaneously. Each interaction is outlined below.

Audio Response

Audio response was an important addition to the capabilities because it allowed for music, poetry or other sound to be included, giving participants further options when choosing which media to integrate and allowing them the option of bringing outside musical or written work into their Create & Grow Strong pieces.

I chose to integrate music into the collage prototype that I created as one of the examples for the workshop. As you can see below it was quite straightforward to integrate the existing minim library and code into the workshop prototype. I found a simple and clear mp3 to include and connected the interaction to the house.



Figure 16: Prototype 3 – Visible Environment - Audio

Multiple Images Simultaneously

This was a straightforward addition that only called for the introduction of further images in to the existing if statements connected to a colour signature. As you can see from the sailboats below, the simple code results in multiple images being displayed at once. Quick and easy!



Figure 17: Prototype 4 - Visible Environment - Multiple JPGs from one colour signature

Movement

Including movement was more difficult and unstable than I imagined at the outset. Though I was able to move a character across the X-axis of the display screen. I am currently investigating this further to allow for movement beyond a straight x or y axis line however it is working in its current form which sees the lady move away from the house when the colour signature is found.

Prototype 6: Integrating Wiimotes

Once I had these code aspects solidified I set to work integrating Wii mote capability. In principle, this was very straightforward. By using either DarwinRemote or

OSCulator, a Wii mote can be connected to any computer using Bluetooth. Both programs also have built in code to use the Wii signal as a mouse. This was suited to this project and worked well, except for some drift, which can be worked through by adjusting the yaw. Unfortunately, when 3 Wii motes are used in a space simultaneously there are additional issues. The separation of the Wii motes and keeping each of them dedicated to a single computer becomes quite difficult to the point that Wii motes were not possible for the use at this iteration's final showcase. After some consideration I have resolved to leave the integration of Wii Motes for a future iteration if it becomes apparent that the inclusion of them has an important and specific purpose outside of novelty.

Technology Reflections

Developing the technology for this piece was a great reminder of the efficiency of small pieces of code in place of long and more complicated series'. The first to second prototype is a great example of this. Had I not been introduced to colorUnderMouse I would have ended up writing significant batches of code based on mapping that may or may not have worked in practice.

Another great lesson was to test, test and test again in the gallery space that you will be using. Though it was a great and successful final showcase (see page 63) finding a

successful way of using the Wii mote and increasing the stability of the programs while running would have improved the experience.

Though the programs have been stable when running in the past, it becomes clear when they run for upwards of 15 – 20 minutes that they must be reset or redrawn as they start to freeze up. This is particularly an issue for those programs that make use of the minim library (audio feature).

The Workshops

The original intention was to deliver a series of workshops to both youth and children as part of an 8-week curriculum. The first phase would see youth develop a book of physical templates that had digital counterparts. These would then be brought to children to colour, paint and otherwise enhance over two weeks, thereby co-creating their own digital environments. This initial plan changed as time and partnership limitations became clear however these workshops were of great value, to this thesis, for future research and the youth who participated.

Development

The workshop building process was one that began with my business plan for The Creativity Campus in 2012. I gathered inspiration from everywhere possible, interactions with the children of friends and family, the many books on development

and creativity listed in my bibliography and from reflections based on my own experiences of learning and creativity.

In line with the mantra *Enable Creation & Confidence in Context* I sought to build a program that focused on the act of creativity rather than the perceived quality of the works produced. I determined a number of must have options and also a number of nice to have options. Many of the nice to have aspects were left for future iterations however the must have aspects were built in to the sessions and served their purposes.

Must have elements were:

- a local youth population facing adversity
- weekly sessions that participants could count on
- collaboration with a community group that could provide adequate workspace
- access to computers that could host photo editing and Processing software
- access to cameras, either through students, myself or the community
- incorporation of an element of the physical environment as a means of representing each participant's unique perspective on their context
- encouragement of the use of a variety of media options (paint, pastel, photography, collage, clay, audio clips, poetry etc.) to allow for tactile and creative exploration

- access to a community counselor familiar with the needs of and challenges faced by local youth

Nice to have elements were:

- a community of local children for youth to create with and for
- a weekday time slot to allow workshops to also serve as afterschool programming
- a school or library partnership that would provide access to a wide range of participants with minimal travel from school
- sufficient time to allow for meditation and physical play as part of the workshop
- healthy, shareable snack options
- community involvement and support via parents, teachers or local partners
- space to host the final, gallery-style showcase celebration

Many of these must have needs were met by Focus, my partner institution.

Partnering with Regent Park Focus Youth Media Arts Centre (Focus)

Focus is a community focused, not-for-profit media lab located in the heart of Regent Park. It serves both youth and adults and provides radio (Radio Regent) and television (RPTV) programming via dedicated stations provided to them by a corporate sponsor. Launched in 1990 and a product of collaboration between the community, Toronto Arts Council, Ontario Arts Council, Ontario Trillium Foundation, Focus provides media training and mentorship programs. It also serves as an important information

point for the local area and an example of participatory media as a component of healthy community building.

I was able to meet with Adonis Huggins, executive director of Focus, through the Digital Futures Initiative at OCAD U and he was quick to partner with me in the execution of the program. Focus also provided a fantastic youth counselor, Pat Whittaker, who generously shared her insights on the youth and community while also committing her time to supervise the workshops as participating youth counselor on the project (a condition of my Research Ethics Board approval (REB)).

Issues with Incorporating the Children of Regent Park

I was also hoping to establish a partnership with either the local library or one of the local primary schools in Regent Park as part of the program however early on it became clear that there was simply not enough time to build the relationships and gain the approval needed (for example approval from the Toronto District School Board REB) to work with public schools covered by its board. This turned out to be a blessing, as I had allotted 6 weeks with youth and two weeks with children between October 1st and December 17th and I wasn't able to get my OCAD REB approval until October 24th.

Revised timeline

The revised timeline came partially as a result of the REB approval process but also because I ended up holding two information sessions instead of one. After some back and forth with Focus on scheduling it was decided that Saturdays between 4 and 6 pm would be the best time for the facility to host the sessions. The first information session was held at the same time after posters were hung around the centre and also at local community centres, arts facilities, schools and grocery stores.

After very low response rates (only 4 youth who were visiting Focus for other reasons) showed up I remade the posters (see Recruitment Posters - Appendix 1) and held a second information session. Fortunately, three of the youth from the previous week returned eagerly and I was able to use them as my participants. They were eager to start and we began the program the next week (See Curriculum - Appendix 2).

Sessions & Celebration

Workshop sessions were conducted over 7 weeks with the goal of each youth producing a digital “environment” based on a space in their real life and enhanced to include a character who could move around in the space and three interactive elements that would react to the movement of the character around the scene. This digital scene would be derived from physical works created by participants over the

course of the workshops using paint, pastels, photography, audio clips and other media.

Sessions

Weekly sessions were two hours long and began with a catch up conversation about what each participant had been up to since the last session (i.e. – How was your history test? What did you do for your birthday on Thursday?). This led into an introduction to the activity for the day and an explanation of why it was relevant to the rest of the project and the timeline for completion. We would sit around a single table, drawing, painting and chatting through problems and life events while snacking and laughing. Often youth were late arriving so this meant instructions were repeated more than once, while a bit frustrating, this provided an opportunity for participants to clarify or explain aspects to latecomers, helping to establish collaborative learning where their might not have been a chance otherwise.

One aspect that was particularly important was the conversation that took place as we undertook whatever activity was the focus of the day. A great example of this can be seen through a breakdown of the second session, based around the theme of Exploring.

The goal of that week's session was to give youth a chance to share their stories of living in Regent Park. All three participants grew up in Regent Park and were eager to

share their experiences. We visited childhood play spaces, a peace garden, outdoor parks and steps one participant used for her dance routines . We also stopped by the site of the torn down building Jub Jub Exo and Ayabar Nahk met and grew up in. As we roamed they discussed feelings of sadness, the income stratification being enforced by developments that were coming out of the revitalization and loss at losing their community, friends and special places. This displayed self-awareness, insight, empathy and expressiveness and made clear that ,despite the limitations imposed by poverty and crime in the neighbourhood, the youth engaged with their community in ways that allowed them to take advantage of available resources. All of this indicates that these youth came to the sessions already exhibiting traits associated with resilience. Though their family attributes, as noted by Michael Ungar's characteristics of resilient children and youth, may have been somewhat lacking it is clear that as kids the participants were able to benefit from monitoring by other community members and access to recreation, school and relationships that afforded them healthy experiences which resulted in goals and, for the most part, a positive outlook and hopefulness.

Something that was important and unique was the opportunity to speak candidly about the changes happening in the area. When we returned to Focus I employed reflective listening techniques, mirroring back the comments of the youth to each of them in an attempt to dig deeper into their feelings about the revitalization. It was clear that they had never spoken about their feelings about the changes taking place

in their neighbourhood and the fact that “rich” people were moving into buildings that their homes had been torn down to make space for.

They were clearly expressed the tension they felt, with Ayabar Nahk summing it up:

“I like the revitalization but our friends are moving away, one moved to Scarborough and now we never see her...”

Jub Jub responded:

“Ya, all of our memories are gone. “

Wanting to draw Break Free into the conversation more I asked him what whether he felt the change was hard. He said:

“ Yes, change is hard, You’re used to one thing and you don’t think about these things changing and becoming different.”

The other two participants agreed and it became clear that they didn’t know what to expect from the revitalization when it was announced and that changes were taking them by surprise.

Before the youth began drawing their ideas for landscapes they each presented the sketchbook covers they created in session one and explained how they felt they represented creativity.

As each of them explained the group listened actively and supportively, oohing and ahhhhing at individual pieces.

Each of them described creativity differently however there was a throughline that revealed they felt creativity helped them to cope with life. This may have been connected to the name of the workshops (Create & Grow Strong) and the fact that they knew the intention was to understand how creativity might help youth to feel more resilient but, even if this was the case, it seemed that the youth felt this way genuinely and worked to reflect that in their sketchbook covers.

Below are some responses,

“I wrote ‘Express Yourself’ down this side. You should try to be the best you can be, like, to live on top of your dreams.”
-Ayabar Nahk

“[Mine is about my heroes. Spiderman is my favourite.] He’s just a normal teenager who goes through the same high school problems and gets bullied. You can relate to him. I think all of us might have got bullied once or twice and he inspires me to be resilient. Even after his Uncle Ben died he still wasn’t just lying around being sad.”
- Jub Jub Exo

These conversations were highlighted in feedback questionnaires as some of their favourite experiences within the workshops and I believe this underscores the importance of conversation while also revealing the way that creative work can create an environment conducive to creative relaxation that Winnicott suggests may result in growth, health and self-discovery.

Grounding the work in the real life context of Regent Park helped to bring the youth to the project in a real way and once this exercise was complete they came to sessions with clear ideas and goals for themselves. They often got work done outside of class time and wanted to stay later or start earlier as they were having fun at sessions and were excited to complete their projects and to showcase them at the final celebration.

Celebration

The final showcase took place in the graduate gallery of OCAD University on December 18th, 2014 from 6-9 pm. Participants arrived to see their work projected on the gallery walls accompanied by their artist's statements. They were excited and encouraging to one another, giving each project time and space to be explored by all of them as a group.

Again, food was an important part of the celebration. As part of the experience we provided a variety of beverages to youth and visitors as they walked around speaking to the artists about their work and playing with the installations. Later in the evening when the flow of people slowed somewhat pizza was brought in for the youth and they grouped together, finishing it quickly while sipping their juices and chatting excitedly about the experience of the evening. They were all very polite and clearly articulated the stories behind their pieces to the guests that asked them about the works.

By the end of the evening the youth left full of energy, excited at having been given business cards by one of the industry professionals who came to visit and all suggested they were proud of their works. In their follow up questionnaires, when asked if they had fun at the final party participants said:

*“I had a lot of fun because I got to show my work,
got a business card and could possibly get a job.”*

-Jub Jub Exo

*“YEEEEEEEESSSS! [Laura’s husband] Alex was so nice and ordered pizza.
I’m sad this is the last time I will see Laura. Also, the people I talked to were
really nice.*

- Ayabar Nahk

And in classic, short but sweet style Break Free said:

“Yea, kinda.”

One interesting point that I anticipate will carry through to partnerships with other facilities that serve large communities is that, although the Focus receives support from sponsors and grants it remains somewhat under resourced. This leaves staff at the centre willing, but not always, able to respond to multiple emails or phone calls and unable participate in activities like the final showcase. Though I know there was lots of support for the program and interest in the work of the participants only a single board member was able to come to the end of program celebration despite setting expectations that around 8-10 representatives were likely to visit the celebration.

This is an important point because I took as a given that at least one of the counselors or facility staff members would be able to attend as a representative for Focus. I assumed that it would be important to the participants however, because many other people were able to attend, including visitors from OCAD U and Toronto's digital design community, the youth were very excited and happy with the turn out. This speaks to the danger of projecting one's own expectations onto participants, something I will keep in mind for future iterations of the series.

On the technological side of the celebration the intention was to make use of Wii motes as the cursors within the environment. When it came to making use of the wii in the gallery I connected the remotes to mac minis using DarwiinRemote. This method was unreliable, only one remote was able to connect to the computer and then all subsequent Wii motes connected to the first mac mini. After many attempts I tried to connect using OSCulator, another program that connects Wii motes to computers using Bluetooth however the problem persisted. As a replacement for the Wii motes I connected a wireless mouse to each mac mini. This provided a stable and effective connection that was satisfying both for the artists and their guests and visitors.

Workshop Reflections

In his work, *Resilience and Healing Amidst Depressive Experiences: An Emerging Four-Factor Model from Emic/Etic Perspectives*, Andrew Halata examines how resiliency has been considered in the past when treating patients suffering from depression. He proposes a four-factor approach that is consistent with the ethos of the Create & Grow Strong program and also provides meaningful guidelines for its improvement.

The four-factor approach sees resilience as a mechanism that is influenced by a) physical and biological strengths b) psychological resources c) interpersonal or emotional skills and d) spiritual capabilities. It suggests that all of these aspects should be addressed within resiliency programs via a holistic approach, rather than treating them as separate considerations to be addressed individually. Halata goes on to note that much of the past work and research on resiliency has been based in etic or quantitative data collection, he suggests that focus on the Emic, or the qualitative, individual narratives of those being considered is of “crucial importance” and that such a step change that would serve to deepen the understanding of resilience and adversity by researchers and clinicians. (Halata, 2011.)

In designing The Create and Grow Strong workshops, the research meets the four factor criteria in a few ways:

Physical and Biological Resources

Though the neuroplastic aspects of housing weren't measured, as a group we considered the housing and environmental situation faced by youth as they watched their neighbourhood change and were moved from home to home as part of the revitalization plans for Regent Park. We discussed their fears and concerns and the experience of living in an area that is seen as dangerous and impoverished.

Psychological Resources

The workshop creates a social environment where youth can strengthen existing peer relationships or create new ones based on common interests of creativity and technology or the shared experience of life in Regent Park.

Throughout the workshops there were many laughs and jokes shared and the youth were able to let loose and express themselves in ways that brought about an understanding of the lighter side of challenging situations, embodying the important aspect of humour in programming.

This aspect of programming may also have been bolstered by my own approach to the workshops. Throughout each session I made a pointed effort to value and respect each participant's unique voice and contributions. I was warm and generous with praise without being ingenuine or condescending. When, at times, laughter began being directed AT someone, rather than WITH someone, I made sure to redirect the point, supporting the person who was being laughed at and pointing out the

importance of risk taking (for example) to the creative process. Jub Jub Exo pointed to this support, both from me and her peers, in the final points of her artist's statement:

"I'm proud to say this project has benefitted me a lot and I would like to give thanks to my peers and Laura for helping me through it. Thanks again Laura for showing me what I am capable of and for being one of the best mentors out there!"

Interpersonal or Emotional Skills

Group work also made clear the ability of participants to exercise emotional regulation. There were points when they teased one another and quickly recovered and also those when they opened up about bullying and violence when they actively discussed the issues and how they felt about the effect on their selves, peers and community.

The workshops have a strong goal orientation, providing an external event (the showcase) to spur on their work and interest.

All of this took place in the framework of individual narrative, which provided an opportunity for youth to explore their personal experiences of their neighbourhood, context and the subsequent narratives both creatively and in conversation during workshops and then to express their thoughts and feelings about it to a greater audience.

There are some areas, however, that could better meet Halata's criteria and that should be considered for future resiliency programming.

Physical and Biological Resources

Exercise was also intended to be a part of the program with a short dance party at the opening of the weekly program intended to get everybody moving and get out any excess energy stored up. Unfortunately limited time in the space meant cutting that out. Future iterations will definitely see programs lasting at least 3 hours, rather than two, in order to allow for a more holistic workshop.

Though snacks were provided they weren't very nutritious. Halloween candy and birthday cupcakes were the first snacks and juice boxes, granola bars and apple sauce were also shared. It would be great to incorporate a low cost, fun snack menu into the program so that youth and parents knew they could count on something healthy to eat as part of the experience.

Spiritual Capabilities

Spirituality, or a sense of higher purpose, wasn't harnessed by Create & Grow Strong in this iteration. The original intention was for the youth to create digital templates to be enhanced by their younger counterparts timing restrictions meant that the workshops were limited to a single group of youth rather than including kids 4-10 in an ancillary workshop and as part of the final showcase. This would have provided a

higher purpose that may have appealed to more participants or improved the experience for those that took part.

Meditation was also intended to be a part of each weekly session however time limitations meant striking that from the schedule. This is a real shame because meditation has been recognized as increasing creativity, attention, concentration and empathy – all aspects that would be beneficial to the workshop experience.

Discussion

Feedback

Questionnaire results showed most participants felt proud of their work, feeling both confident and hopeful, and referring to newly acquired skills as contributing to their potential employment in the future. The celebratory showcase cemented these feelings by emphasizing the value of their work and the talent it revealed. Both community attendees and professionals in the tech community engaged with the work and the participants, which they said contributed to their feelings of pride and achievement.

Insights Based on Workshops

Though participants were encouraged to relate their work to their experiences of Regent Park the focus was more on being creative and having fun. They had an

amazing time and enjoyed the workshops but in future I think there would be value in keeping focus around a chosen theme so that clearer narratives about the specific adverse events or experiences will emerge. In the case of Regent Park , the youth discussed their concerns about the portrayal of their home, it's reputation as "ghetto" and the new "rich" people moving in and not respecting the community that emerged and was relocated. Though I am thrilled about how the pieces turned out and the work of the participants this conversation didn't translate into the final works.

It should be acknowledged that these youth were already highly motivated people as seen by volunteer hours that numbered hundreds above those mandated by the Toronto District School Board.

They are intelligent, articulate and focused on achieving their dreams. As young teenagers they consider and question the world around them with humour and curiosity and explore darker questions of racism, violence, consumerism, drugs, bullying and reputation as part of their wider experience of learning, dreaming and authenticity.

Two participants were highly motivated by the drive to get into a good university and were already talking about job seeking and how the workshop might help them to get a job with Create & Grow Strong in the future. These two were relentlessly optimistic, strong willed and motivated despite the fact that both suggested their parents were

unaware of the amount of volunteer hours they'd accrued and that they were unlikely to attend the final showcase of their work. The workshops were on Saturday afternoons and the participants were 14 and 15 years old. When many of their peers were engaged in other activities these youth were engaging in the workshop and always reported excitement about the coming week and the showcase at the end of the sessions.

To my mind, these youth were already very resilient which was part of the reason they attended the workshop in the first place.

Children & Youth Resiliency Measure Results

Each participant filled in a Child and Youth Resiliency Measure (CYRM) questionnaire (Liebenberg & Ungar, 2012.) at the beginning of the first session and at the end of the final celebration. Because there were only three participants and the sessions spanned such a short span of time I'm not sure that the results are very robust quantitatively or as an indication of the workshop quality however there were some interesting changes in responses seen that give insight into the lives of the participants between November 1st and December 17th, 2014.

One example is seen in the responses of Break Free who developed his own scale to make that of the established CYRM more specific (see Break Free CYRM

Questionnaire Appendix 3). In his first questionnaire response, said that he was “not at all” happy with where he was in life right now. In the final questionnaire he responded that he was “somewhat” happy with where is was in life, which would suggest an improvement in his circumstances or perhaps his outlook.

This is contrasted elsewhere in his surveys however. When asked if he is able to avoid being bullied he responds with a dot between “a little” and “somewhat” in the first questionnaire and with “not at all” in the final questionnaire. This shows that although he sees himself as less able to avoid bullying his is still happier in his life then before participating in the workshop. Though it is not definitive I hope that the experience helped him to develop the resilient outlook reflected in these responses.

Jub Jub Exo also gave answers that indicated she was less able to avoid being bullied at the time of the final questionnaire versus the first questionnaire. Similarly to Break Free, her final response to the question Do you feel good about who you are? Indicated that she felt better about who she was at the final celebration than she did at the time of the first session. Her response about her happiness with her life remained steady at “quite a bit”.

Also interesting is that Break Free was very clear that his family includes only his parents and siblings while both Jub Jub Exo and Ayabar Nahk include their friends as

part of their description of their families. (See CYRM Questionnaires by Jub Jub Exo Ayabar Nahk Appendix 3)

In another section Ayabar Nahk questionnaire revealed she felt less safe on the way to school than she did at the time of the first questionnaire. This may have been reflective of the fact that a teenage man was stabbed to death in a parking lot in the community during the course of our workshop sessions. Though we did not discuss the incident specifically it was clear that all of the participants have dealt with violence around them at school and in their community but, in our conversations didn't seem particularly upset by it.

Though it is impossible to know if these different responses were directly or indirectly related to the Create & Grow Strong programming I am optimistic that the hopefulness, pride and enjoyment of the sessions helped each of the participants to feel more resilient in the face of bullying and violence in their community.

Reflections on the Research

Making use of both praxis and grounded theory methodologies made for an interesting and valuable research experience, especially given the qualitative focus of this work. The workshops both challenged and reinforced my hypothesis highlighting the importance of this type of programming for youth interested in developing their

skills while expressing their view of their world through creative means and as part of a trusting and relaxed group. Of course, as outlined, the feedback from participants and my own reflections on the experience also highlighted a number of areas that would benefit from change.

These didn't undermine my hypothesis that, by undertaking a creative and contextually relevant project that develops skills, in a group setting, youth begin to cultivate traits that contribute to increased resilience elsewhere in life, but rather emphasized the importance of the praxis and grounded theory approaches going forward as a means of continually adapting the program to meet the needs and opinions of the participants. It is of great importance that participants, especially youth participants, feel themselves to be active co-creators of the workshop and important contributors to the research.

Successes & Failures

Running this program at Focus has reaffirmed my belief that there is both value and demand in establishing a network of Create & Grow Strong programs for youth facing adversity in Toronto, however, there is much to be learned from this pilot project.

First and foremost, two hours on Saturday afternoons is not an appropriate time for the sessions. Two hours doesn't allow for participants to come in and get settled, this

means that the real work is limited to the final hour or 75 minutes of the session and that doesn't leave enough time for work to get done. As a result we were forced to create a Wednesday night Skype session in the final week of the program and extend the final workshop to last 3 hours.

I also believe this awareness of time impinged on participant ability to lose themselves in the work and experience the full benefits of the creative process, which was the biggest detriment to both them and the program.

Facility base scheduling limitations also impacted the program. Saturday afternoons, while great for the researcher, resulted in the centre being empty. Energy that could have fed the program (ie – that of other programs, other community members etc) was sparse and participants often arrived late as a result of conflicting study or library programs that they were taking part in. It is my belief that a higher uptake would have resulted from a weeknight session, which would allow participants to come directly from school to the centre and would leave their weekends free for study, family or community time or recreation. After school activities are notably fewer in Toronto's less affluent areas and some of this deficit could be addressed with independent programs like Create & Grow Strong.

The Future

Having wrapped up the pilot of Create & Grow Strong I am very confident that other communities of children and youth would also benefit from the programming. Over the coming year I intend to explore the potential of Create & Grow Strong to be adapted for use in hospital, rehabilitation and social work settings like the Hospital for Sick Children, YWCA, Families in Transition (for families going through a divorce), Bereaved Families of Ontario and Toronto Rehab. When the program is steady and packaged it would also be interesting to assess the value of bringing the workshops to First Nations reserves where youth and children are particularly burdened by adversity and there is a dearth of programming to address their needs.

Part of the plan for this is to take the work to OCAD University's business incubator, The Imagination Catalyst. I think it would be a great place to flesh out a working business plan, to explore grants and sponsorship and to conduct in depth market research to determine which communities would be the most appropriate for further workshops.

Based on that work, whether within the Imagination Catalyst or on my own, I would then establish a trial that includes both youth and child communities, as per the original intention of this project, with youth creating templates for children in their community to embellish thereby creating a shared work and a greater sense of purpose for the youth involved in the workshops.

Conclusion

In the autumn of 2014 I worked with youth in downtown Toronto to understand the effects of creative expression, and its celebration, on the development of resilience. The project engaged youth with the design mantra of *Enabling Creation and Confidence in Context*. They did this while having fun, learning new skills and engaging with their peers and myself. I was able to explore the hypothesis that:

by undertaking a creative and contextually relevant project that develops skills, in a group setting, youth begin to cultivate traits that contribute to increased resilience elsewhere in life.

This was displayed in the responses to weekly questionnaires which revealed the youth felt pride and confidence in their work and hopeful for the future based the skills they'd learned and their potential to contribute to their university acceptance. Throughout the sessions they also displayed many characteristics of resiliency as they engaged in group work and conversation, supporting one another with humour or empathetic responses where appropriate. All of these qualities align well with the traits outlined by Ungar in his resiliency research.

It was not possible to explicitly prove or disprove the hypothesis due to the number of influencing factors outside of the workshop that could have a similar affect. These include their pre-existing traits of resilience, which were plentiful, support from family

members, engagement in many extracurricular activities and deep-seated motivation to get into a good university and find career success.

The lack of a test or control group and small number of participants, in addition to the short time span of the program, also detract from the conclusiveness of the study. However, the qualitative findings indicate that the workshop did encourage the traits that I was looking to cultivate and there is value in undertaking further work in this area.

It is worth noting that grounded theory does not typically start with a hypothesis. I combined these research approaches because I felt that narrowing the scope with a hypothesis would help me to generate more valuable conclusions. The workshop setting allows for so much variety, so many tangents and an incredible amount of data so the hypothesis allowed me to impose limitations and retain structure that might otherwise have been difficult to maintain.

Grounded theory is intended to generate an emergent theory based on the data and observations during the research. In this instance, I did derive a theory, or rather, I revised my initial theory as outlined in the theoretical diagram on page 43. What emerged is a theory for developing workshops focused around creativity and resilience for youth, particularly those facing adversity in their daily lives.

Developing workshops focused on creativity and fostering resilience in the daily lives of youth facing adversity

Based on my grounded theory research, the most important aspects of creativity and resilience centred programming are the interpersonal elements practiced in the workshop setting.

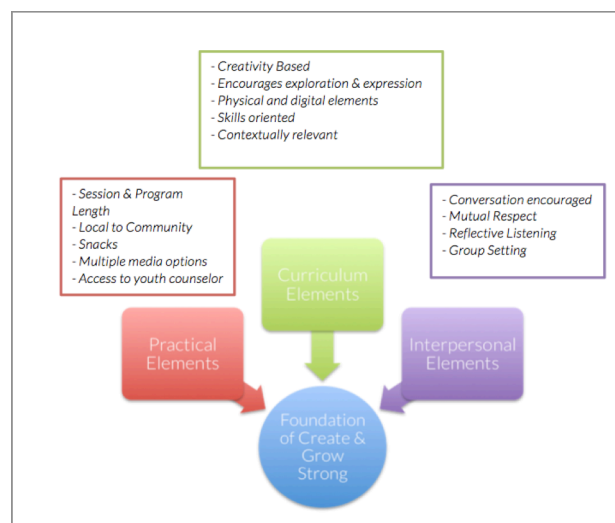
The power of shared ownership and importance of treating youth as respected and valuable contributors to the ongoing workshop development process cannot be underestimated. Youth in the pilot program saw me as a mentor, friend and leader but they also connected deeply with the potential to work with the Create & Grow Strong workshop program in future instances.

I listened reflectively and responded openly about the value of their opinions and ideas. From the first information session to the final celebration participants have referred positively to the fact that our relationship was not one of the traditional student and teacher and I think this is a stand out contributor to its success.

This should not however, undermine the importance of developing programs holistically, as noted by previous researchers and illustrated in the theory diagram below (first referenced on page 43).

Practical elements and those relating to the weekly operations, some as simple as providing snacks and ample time to allow for tangential discussions while creating, are essential to creating an environment that is relaxed and nurtures Winnicott's potential place.

Curriculum elements are also integral to give participants reliable touch points by which to orient themselves through the program and points through out that highlight incremental, process based achievements.



As noted, the pilot program made clear that three areas of development must be addressed holistically if a program is to be successful in engaging youth and promoting traits of resiliency through the creative process and its celebration. It further encourages researchers making use of the theory to collect data with qualitative investigation in mind as part of an ongoing process of refining the workshops to meet the needs of participants and their communities.

Over 8 weeks, as Create & Grow Strong participants, they found aspects of their real lives that they could connect with, merged them with fantasy elements and used those as jumping off points for the development of their final pieces in the workshops.

Together we developed and created 3 virtual environments complete with characters and reactive elements that were brought to digital life through Processing. The youth expressed feelings of pride and confidence as their works were showcased at the final celebration and, in final comments, they noted the value of discussing the impact of the government led revitalization taking place in their neighbourhood.

Throughout the work I engaged in active, participatory research, documenting the workshops on video and using reflective journaling. This process revealed the importance of developing the workshops holistically, taking into account the lives of the participants and the world that they operate in everyday. It also became clear that warmth, acceptance, and genuine interest and encouragement are key factors in

leading these types of workshops if the goal is to create a relaxed environment that encourages growth and self-discovery while nurturing traits of resiliency. As a result of my grounded theory approach I was able to establish a method that I feel will help me to establish future programming that better achieves the goals of Create & Grow Strong, namely to enable youth and children to develop the traits of resilience that will help them elsewhere in life as they use creativity to understand the world around them.

Regarding the projects success as a way of fostering resilience through creativity, all participants completed the CYRM-12 questionnaire, (Liebenberg and Ungar, 2012) adapted to consider Regent Park specifics, before and after the Create & Grow Strong program. Though it was a short program there were changes that were evident between the completion of the first and second questionnaires. It is impossible to draw firm conclusions from the responses but I was happy to see that participants appeared to be more positive (happy with their lives or with who they are) in the face of bullying and violence in their lives.

It should be noted that this project involved only a small group of participants (3) but the results justify expansion of the project to include more participants in Regent Park and partnership with other at risk communities in the city and elsewhere. There are also potential applications for other groups experiencing diminished quality of life including hospitalized youth and children and those coping with divorce, abuse,

homelessness and other challenging situations. These avenues and partnerships will be explored and the data derived from this research may be used to contribute to future iterations of the Create & Grow Strong program series.

As Joseph Chilton Pearce once said: “To live a creative life, we must lose our fear of being wrong.” The goal of Create & Grow Strong is to steal that fear away from youth and children and to replace it with feelings of excitement, competence and curiosity, leaving them feeling empowered as they face a changing world. In order to fulfill this mission the series will grow and change over time, adapting to each group and learning from every community with the goal of helping generations of children and youth to face the challenges of the world they inherit with confidence, self-knowledge and hope.

References

- 1) American Psychological Association. "The Road To Resilience." American Psychological Association. January 1, 2015. Accessed February 12, 2015. <http://www.apa.org/helpcenter/road-resilience.aspx>.
- 2) Coholic, Diana, Mark Eys, and Sean Loughheed. "Investigating the Effectiveness of an Arts-Based and Mindfulness-Based Group Program for the Improvement of Resilience in Children in Need." *Journal of Child and Family Studies* 21, no. 5 (2012): 833-44.
- 3) De Caroli, Maria Elvira, and Elisabetta Sagone. "Resilient Profile and Creative Personality in Middle and Late Adolescents: A Validation Study of the Italian-RASP." *American Journal of Applied Psychology* 2, no. 2 (2014): 53-58.
- 4) Dunn, Dana S., Gitendra Uswatte, and Timothy R. Elliott. "Happiness, Resilience, and Positive Growth Following Physical Disability: Issues for Understanding, Research, and Therapeutic Intervention." In *Oxford Handbook of Positive Psychology*. Oxford: Oxford University Press, 2009.
- 5) Friere, Paulo. *Pedagogy of the Opressed*. 30th Anniversary ed. New York: Continuum, 2000.
- 6) Gopnik, Alison. *The Philosophical Baby: What Children's Minds Tell Us about Truth, Love, and the Meaning of Life*. New York: Farrar, Straus and Giroux, 2009.
- 7) Hatala, Andrew R. "Resilience and Healing Amidst Depressive Experiences: An Emerging Four-Factor Model from Emic/Etic Perspectives." *Journal of Spirituality in Mental Health*, 2011, 27-51.

- 8) Jindal-Snape, D., D. Davies, C. Collier, A. Howe, R. Digby, and P. Hay. "The Impact of Creative Learning Environments on Learners: A Systematic Literature Review." *Improving Schools*, 2013, 21-31.

- 9) Liebenberg, L., and M. Ungar. *Validation of Sub-scales on the Child and Youth Resilience Measure-28 (CYRM-28)*. 2012.

- 10) Macpherson, Helen, Angie Hart, and Becky Heaver. "Building Resilience through Collaborative Community Arts Practice: A Scoping Study with Disabled Young People and Those Facing Mental Health Complexity." In *AHRC Connected Community Scoping Study Report*. AHRC, 2012.

- 11) Prescott, Margaret V., Banu Sekendur, Bryce Bailey, and Janice Hoshino. "Art Making as a Component and Facilitator of Resiliency With Homeless Youth." *Art Therapy*, 2008, 156-63.

- 12) Rolfe, Gary, Dawn Fre, and Melanie Jasper. *Critical Reflection for Nursing and the Helping Professions: A User's Guide*. Basingstoke: Palgrave Macmillan, 2001.

- 13) Scott, Helen. "What is Grounded Theory? – Grounded Theory Online; Supporting GT Researchers." What is Grounded Theory? – Grounded Theory Online; Supporting GT Researchers. January 1, 2009. Accessed January 30, 2015. <http://www.groundedtheoryonline.com/what-is-grounded-theory>.

- 14) Statistics Canada. "NHS Profile, 2011." Government of Canada, Statistics Canada. January 1, 2011. Accessed January 30, 2015. <http://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/index.cfm?Lang=E>.

- 15) Tierney, William G., and Margaret W. Sallee. "Praxis". In *The Sage Encyclopaedia of Qualitative Research Methods*, edited by Lisa M. Given, 676082. Thousand Oaks, CA: SAGE Publications, Inc., 2008 doi: <http://dx.doi.org.ezproxy-library.ocad.ca/10.4135/9781412963909.n337>
- 16) Ungar, Michael. "Researching and Theorizing Resilience across Cultures and Contexts." *Preventive Medicine*, 2012, 387-89
- 17) Ungar, Michael T. "Constructing Narratives of Resilience with High-Risk Youth." *Journal of Systemic Therapies*, 2001, 58-73.
- 18) Ungar, Michael T. "Nurturing Hidden Resilience in At-risk Youth in Different Cultures." *Journal of the Canadian Academy of Child and Adolescent Psychiatry / Journal De L'Academie Canadienne De Psychiatrie De L'enfant Et De L'adolescent* 15, no. 2 (2006): 53-58.
- 19) Winnicott, D. W. *Playing and Reality*. 2nd ed. New York: Basic Books, 1971.
- 20) Winnicott, D.W. "The Theory of the Parent-infant Relationship: Further Remarks." *International Journal of Psychoanalysis*, no. 43 (1962): 238-39.
- 21) Wolin, Steven J., and Sybil Wolin. *The Resilient Self: How Survivors of Troubled Families Rise above Adversity*. New York: Villard Books, 1993.
- 22) World Bank. *Resilience in Education System (RES-360 degree): rapid assessment manual. Education Resilience Approaches (ERA) program*. Washington DC; World Bank, 2013.
<http://documents.worldbank.org/curated/en/2013/01/17708055/resilience-education-system-res-360-degree-rapid-assessment-manual>

Bibliography

- 1) Aisenberg, E., and T. Herrenkohl. "Community Violence In Context: Risk And Resilience In Children And Families." *Journal of Interpersonal Violence*, 2008, 296-315.
- 2) Boldt, Randall, and Catherine Brooks. "Creative Arts: Strengthening Academics and Building Community with Students At-Risk." *Reclaiming Children and Youth: The Journal of Strength-based Interventions* 14, no. 4 (2006): 223-27.
http://ducktowna.wikispaces.com/file/view/creative_artsstrengtheningacademicsandbuildingcommunitywithatriskstudents.pdf.
- 3) Carbonell Ph D, Diana, Helen Z Reinherz D Sc, Rose M Giaconia, Cecilia Stashwick, Angela Paradis, and William Beardslee. "Promoting Resilience in Young Adults at Risk for Depression." *Child and Adolescent Social Work Journal*, 2002, 393-413.
- 4) Carson, Shelley. *Your Creative Brain: Seven Steps to Maximize Imagination, Productivity, and Innovation in Your Life*. San Francisco: Jossey-Bass, 2010.
- 5) Constantine, Norman A, Bonnie Benard, and Marycruz Diaz. *Measuring Protective Factors and Resilience Traits in Youth: The Healthy Kids Resilience Assessment*. Public Health, 1999.
- 6) De Bono, Edward. *How to Have a Beautiful Mind*. London, England: Vermillion, 2004.
- 7) Gillham, Jane, and Karen Revich. "Resilience Research in Children." *Resilience Training in Children*. Accessed July 3, 2014.
<http://www.ppc.sas.upenn.edu/prpsum.htm>.
- 8) Hickey-Moody, Anna. Youth arts, place and differential becomings of the world. *Continuum*, 2010, 24, no. 2: 203-214.
- 9) Hritz, Susan A., and Patricia A. Gabow. "A Peer Approach to High Risk Youth." *Journal of Adolescent Health*, 1997, 259-60.

- 10) Jenkins, Adelbert. "Creativity and Resilience in the African American Experience." *The Humanistic Psychologist*, 2005, 25-32.
- 11) Kelley, David, and Tom Kelley. *Creative Confidence: Unleashing the Creative Potential within Us All*. New York: Crown Business, 2013.
- 12) Lee, Tak Yan, Chau Kiu Cheung, and Wai Man Kwong. "Resilience as a Positive Youth Development Construct: A Conceptual Review." *The Scientific World Journal*, 2012, 1-9.
- 13) Masten, Ann S. "Ordinary Magic: Resilience Processes In Development." *American Psychologist* 56, no. 3 (2001): 227-38.
- 14) Neuman, Rachel. *Promoting Resilience in At-risk Youth: The Development of a Therapeutic Model*. Wilmington, Delaware: Widener University, 2004.
- 15) Oddone, Angela. "Promoting Resilience in an "At Risk" World." *Childhood Education*, 2002, 274-77.
- 16) Osterling, Kathy Lemon, and Alice M. Hines. "Mentoring Adolescent Foster Youth: Promoting Resilience During Developmental Transitions." *Child and Family Social Work* 11, no. 3 (2006): 242-53.
- 17) Reas, Casey, and Ben Fry. *Getting Started with Processing*. Beijing: O'Reilly, 2010.
- 18) Robinson, Ken. *Out of Our Minds: Learning to Be Creative*. Fully Rev. and Updated ed. Oxford: Capstone, 2011.
- 19) Sternberg, Robert J. "The Nature of Creativity." *Creativity Research Journal*, 2006, 87-98.
- 20) Trinetia, Respress, and Ghazwan Lufti. "Whole Brain Learning: The Fine Arts with Students at Risk." *Reclaiming Children and Youth*, 2004, 24-31. Accessed September 1, 2014.
http://reclaimingjournal.com/sites/default/files/journal-article-pdfs/15_1_Respress_Lutfi.pdf.

- 21) "Resilience in Education System (RES-360 Degree) : Rapid Assessment Manual (English)." *World Bank Documents & Reports*. January 1, 2013. Accessed February 13, 2015.
<http://documents.worldbank.org/curated/en/2013/01/17708055/resilience-education-system-res-360-degree-rapid-assessment-manual>.

Appendices

Appendix 1: Recruitment Posters



Figure 17: Recruitment Poster V1. Up for 6 days in 8 locations

INTRODUCTORY WORKSHOPS TO PROGRAMMING FOR GAMING & INTERACTIVE DESIGN

OPEN TO YOUTH AGE 13-19
SATURDAY AFTERNOONS (4-6) FROM
NOVEMBER 1 - DECEMBER 13



IF YOU'RE INTERESTED, COME TO THE INFO SESSION:
4 PM - SATURDAY, OCTOBER 25, 2014

AT THE REGENT PARK FOCUS YOUTH MEDIA CENTRE - 38 REGENT STREET

LEARN PROCESSING LANGUAGE BASICS
AND GRAPHICS INTERACTION

DELIVERED IN PARTNERSHIP WITH OCAD UNIVERSITY'S DIGITAL FUTURES

INITIATIVE EMAIL LAURA STAVRO-BEAUCHAMP AT LS13VO@STUDENT.OCAD

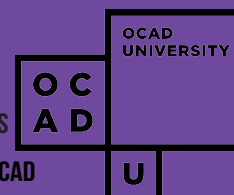


Figure 18: Recruitment Poster V2. Up for 6 days in 15 locations

Appendix 2: Curriculum

Workshops took place Saturdays from 4-6 pm at the Regent Park Focus Media Arts Centre (Focus) at 38 Regent Street.

October 18 & 25: Information Sessions

Held October 18 at 4 pm the informational session provided details about the program to potential participants and their parents. The sessions were advertised around the neighbourhood and at Focus in the hopes that 6-8 youth will sign up for the program.

Consent forms were made available to everyone at the session and returned completed at the first session. For this session, Create & Grow Strong participants needed to have parental consent if under 18 years of age and had to be members of the Regent Park community.

November 1: Understanding (Session 1)

This first session was be used to inform youth about the meaning behind the research, what it aims to learn and what is expected from each participant. The first hour or so was discussion based and looked at the technology we were using.

In the second hour we created sketchbook cover collages that reflected our ideas of creativity. Youth finished them over the week and then discussed the meaning behind them the in session two. Participants also completed the CYRM questionnaire. (Liebenberg & Ungar, 2012.).

November 8: Exploring (Session 2)

This was a walking session around Regent Park. The youth guided us through their daily environments and discussed the significance of the revitalization, their memories and how life has changed for them as a result. As they explained they took pictures to help inspire their digital art pieces.

The second hour was spent talking through the creative sketchbook covers and participants were able to discuss and sketch their ideas.

November 22: Creating (Session 3)

This session was focused on creating prototypes of environments. Participants spent the session thinking up moving parts, reactions and what the goal of the environment is. There wasn't any goal more than artistic expression but understanding what the piece is trying to say, what we want it to show or how it might be interpreted was part of the exercise.

Participants also began thinking about which mediums they wanted to use to enhance their environment (paint, pencil crayon, collage, clay, photography etc).

November 29: Refining (Session 4)

The refining segment saw participants working to refine their ideas and create a final product.

We compiled the initial templates and will begin working on the embellishing their environments. The youth were given templates to take home that outlined the code we'd be using to translate their physical prototypes in to digital pieces.

December 6: Translating (Session 5)

In this session we looked at the code that translated our physical works into the digital world. I reintroduced participants to the technologies and walked them through the code we were using as they put finishing touches on their physical works..

December 10: Additional session – (Session 6) Skype

This session focused on coding and photo editing, which participants were doing at home to make up for missed class time due to late starts.

December 13: Synthesizing (Session 7)

Expanded to 3 hours

This final session we worked through the final pieces. Participants worked very hard to get their pieces finished on time and to their satisfaction for the showcase later that week.

December 18: Final Showcase

At the final showcase members of the OCAD and outside design community came to celebrate the hard work of the participants. From 7-9pm the artists walked people through their works and spoke about the stories behind them with visitors.

Appendix 3: Code Documentation

Code is also available on Github: https://github.com/LoStavro/create_and_grow_strong_code

Prototype 1 – House, Sun, Flowers (Initial prototype)

```
// house body
int x1 = 160;
int y1 = 470;
int w1 = 130;
int h1 = 140;

// Sun
int x2 = 530;
int y2 = 141;
int radius2 = 90;

// Tree
int x3 = 530;
int y3 = 470;
int radius3 = 80;

int x4 = 520;
int y4 = 510;
int w4 = 20;
int h4 = 100;

void setup () {
  size (775, 775);
  background (255);
  smooth ();
  ellipseMode(RADIUS);
}

void draw () {
  drawHouse();
  drawSun();
  drawTree();
}

void drawHouse () {
  //roof
  fill (209, 21, 37);
  triangle (160, 470, 229, 400, 290, 470);

  // house
  if ((mouseX > x1) && (mouseX < x1+w1) &&
    (mouseY > y1) && (mouseY < y1+h1)) {
    fill(21, 209, 110);
  } else {
    fill (19, 94, 211);
  }
  rect (x1, y1, w1, h1);
}

void drawTree() {
  // tree
  float d = dist(mouseX, mouseY, x3,y3);
  if (d < radius3) {
```

```

    fill (9, 131, 43);
  } else { fill (21,209,50);}
  ellipse (x3, y3, 80, 80);

  fill (95, 53, 52);
  rect (x4, y4, w4, h4);
}

void drawSun () {
  // sun
  float d = dist(mouseX, mouseY, x2, y2);
  if (d < radius2) {
    fill (245, 255, 109);
  } else {
    fill (255, 223, 41);
  }
  ellipse (x2, y2, 100, 100);
}

```

Prototype 2 - ColorUnderMouse (Basic Reaction Example)

```

/*
IMAGES
Background image - must be same size as background
Hidden Background image - with colourblock objects created in photoshop with
reactive objects filled with bold colours and assigned hexcodes
Cursor Image
Cloud
Man
Flowers
*/

// REACTIVE IMAGES
PImage background;
PImage mouseCursor;
PImage hiddenLandscape;
PImage cloud;
PImage flower;
PImage man;

color colorUnderMouse;

int houseNumber = #0610ec;
int flowerNumber = #f10c2d;
int sunNumber = #f7ee0b;
int manNumber = #7108c2;

color prev;

void setup () {
  size (775, 669);
  smooth ();
  ellipseMode(RADIUS);

  mouseCursor = loadImage("bee cursor.png");
  background = loadImage("housetreesunflowers.JPG");
  hiddenLandscape = loadImage("housetreesunflowers COLOR BLOCK.jpg");
  cloud = loadImage("Cloud.png");
  man = loadImage("man.png");
  flower = loadImage("flowers3.png");
}

```

```

void draw () {
    background (background);
    frameRate (30);
    cursor (mouseCursor);

    {
        colorUnderMouse=color(hiddenLandscape.get(mouseX, mouseY));
        //println(colorUnderMouse);

        if ((colorUnderMouse==houseNumber)&&(colorUnderMouse!=prev))
        {
            println("you hit the house!!");
            frameRate (1.0);
            image(man, 300, 560);

        } else if ((colorUnderMouse==sunNumber)&&(colorUnderMouse!=prev))
        {
            println("you hit the sun!!");
            frameRate (1.0);
            image(cloud, 450, 50);
        } else if ((colorUnderMouse==flowerNumber)&&(colorUnderMouse!=prev))
        {
            frameRate (1.0);
            image(flower, 370, 540);
        }
        prev = colorUnderMouse;
    }
}

```

Prototype 3 – Collage Example (Audio Example)

```

import ddf.minim.*;

Minim minim;
AudioPlayer player;
AudioInput input;

// REACTIVE IMAGES
PImage background;
PImage mouseCursor;
PImage hiddenLandscape;
PImage cloud;
PImage butterflies;
PImage music;

color colorUnderMouse;

int houseNumber = #0d15e6;
int flowerNumber = #e70c35;
int sunNumber = #f7eb23;

color prev;

void setup () {
    size (1440, 900);
    smooth ();
    ellipseMode(RADIUS);

    minim = new Minim(this);
    player = minim.loadFile("FurElise.mp3");
    input = minim.getLineIn();
}

```

```

    mouseCursor = loadImage("bird.png");
    background = loadImage("collageenviro.png");
    hiddenLandscape = loadImage("collageenviro COLOURBLOCK.png");
    cloud = loadImage("cloud2x.png");
    butterflies = loadImage("collagebutterflies.png");
    music = loadImage("music.png");
}

void draw () {
    background (background);
    frameRate (30);
    cursor (mouseCursor);
    {
        colorUnderMouse=color(hiddenLandscape.get(mouseX, mouseY));
        //println(colorUnderMouse);

        if ((colorUnderMouse==houseNumber)&&(colorUnderMouse!=prev))
        {
            println("you hit the house!!");
            frameRate (1.0);
            image(music, 450, 250);
            {
                player.play();
            }
        }

        else if ((colorUnderMouse!=houseNumber)&&(colorUnderMouse==prev))
        {
            player.close();

            //since close closes the file, we'll load it again
            player = minim.loadFile("FurElise.mp3");
        }

        else if ((colorUnderMouse==sunNumber)&&(colorUnderMouse!=prev))
        {
            println("you hit the sun!!");
            frameRate (1.0);
            image(cloud, 950, 45);
        }
        else if ((colorUnderMouse==flowerNumber)&&(colorUnderMouse!=prev))
        {
            frameRate (1.0);
            image(butterflies, 800, 540);
        }
    }
    prev = colorUnderMouse;
}
}

```

Prototype 4 - Skyline Example (Multiple Images from Single JPG)

```

// REACTIVE IMAGES
PImage background;
PImage mouseCursor;
PImage hiddenLandscape;
PImage fish;
PImage sailboat;
PImage redTower;

color colorUnderMouse;

int towerNumber = #f70b33;
int rWaterNumber = #7e17e0;
int leftWaterNumber = #efee3c;

```

```

color prev;

void setup () {
  size (775, 769);
  smooth ();
  ellipseMode(RADIUS);

  mouseCursor = loadImage("SEAGULL CURSOR.png");
  background = loadImage("Toronto Skyline.jpg");
  hiddenLandscape = loadImage("Toronto Skyline COLOURBLOCK.jpg");
  fish = loadImage("fish jumping .png");
  sailboat = loadImage("sailboat no bkgrd.png");
  redTower = loadImage("RED CN.png");
}

void draw () {
  background (background);
  frameRate (30);
  cursor (mouseCursor);
  {
    colorUnderMouse=color(hiddenLandscape.get(mouseX, mouseY));
    //println(colorUnderMouse);

    if ((colorUnderMouse==towerNumber)&&(colorUnderMouse!=prev))
    {
      println("you hit the cn tower!!");
      frameRate (1.0);
      image(redTower, 73, 55);
    } else if ((colorUnderMouse==rWaterNumber)&&(colorUnderMouse!=prev))
    {
      println("let's go for a sail!!");
      frameRate (1.0);
      image(sailboat, 670, 495);
      image(sailboat, 450, 495);
      image(sailboat, 200, 495);

    } else if ((colorUnderMouse==leftWaterNumber)&&(colorUnderMouse!=prev))
    {
      println("you found a fish !!");
      frameRate (1.0);
      image(fish, 150, 650);
    }
    prev = colorUnderMouse;
  }
}

```

Prototype 5 –Coloured Pencil Example (Cursor triggers movement)

```

float x, y;
float dim = 50.0;

// REACTIVE IMAGES
PImage background;
PImage mouseCursor;
PImage hiddenLandscape;
PImage butterflies;
PImage lady;
PImage birds;

color colorUnderMouse;

int houseNumber = #3d3df0;
int flowerNumber = #bd0f1f;

```

```

int sunNumber = #09731d;
//int manNumber = #7108c2;

color prev;

void setup () {
  size (1440, 800);
  //(775, 669);
  smooth ();
  ellipseMode(RADIUS);

  mouseCursor = loadImage("bee cursor.png");
  background = loadImage("Pencil Example.png");
  hiddenLandscape = loadImage("Pencil Example COLOURBLOCK.png");
  birds = loadImage("Birds.png");
  lady = loadImage("Lady.png");
  butterflies = loadImage("butterflies.png");
}

void draw () {
  background (background);
  frameRate (30);
  cursor (mouseCursor);
  {
    colorUnderMouse=color(hiddenLandscape.get(mouseX, mouseY));
    //println(colorUnderMouse); // look for color hexCode

    if ((colorUnderMouse==houseNumber)) { //&&(colorUnderMouse!=prev)) { // if
it's houseNumber and not equal to previous color
      println("you hit the house!!"); //print line you hit the house
      frameRate (1.0);
      x = x +100.8; //
      if (x > width + dim) // if x is greater than 25
      {
        x= -dim;
      }
      translate (x, height/2-dim/2);
      image(lady, 400, 300);
    }

    else if ((colorUnderMouse!=houseNumber)&&(colorUnderMouse==prev)){
    }

    else if ((colorUnderMouse==sunNumber)){ //&&(colorUnderMouse!=prev)){
      println("you hit the sun!!");
      frameRate (1.0);
      image(birds, 660, 200);
    } else if ((colorUnderMouse==flowerNumber)){ //&&(colorUnderMouse!=prev)){
      frameRate (1.0);
      image(butterflies, 800, 590);
    }
    prev = colorUnderMouse;
  }
}

```

Final Template for Workshop Use

CREATE & GROW STRONG CODE
 BASIC EXAMPLE
 BY LAURA STAVRO-BEAUCHAMP
 OCAD UNIVERSITY, TORONTO.

```
-----

CODE TO BE USED IN PROCESSING VERSION 2.2.1 (JAVA)

/*
ADD FILE - LOAD IMAGES
Background image - must be same size as background
Hidden Background image - colourblock objects created in photoshop with reactive
objects filled with bold colours and assigned hexcodes
Cursor Image
Character Images
*/

// - "comments out" the line which means the line won't be active
/* this section is commented out because of the star slash symbols. Good for
chunks of text. */

// REACTIVE IMAGES
PImage background;
PImage mouseCursor;
PImage hiddenBackground;
PImage cloud;
PImage flower;
PImage man;

color colorUnderMouse;

int houseNumber = #0610ec; //set houseNumber as the colourblock hex code
int flowerNumber = #f10c2d;
int sunNumber = #f7ee0b;
int manNumber = #7108c2;

color prev;

void setup () { // this section sets up the basics for the sketch, loads images
etc
  size (775, 669);
  smooth ();
  ellipseMode(RADIUS);

  mouseCursor = loadImage("bee cursor.png");
  background = loadImage("housetreesunflowers.JPG");
  hiddenBackground = loadImage("housetreesunflowers COLOR BLOCK.jpg");
  cloud = loadImage("Cloud.png");
  man = loadImage("man.png");
  flower = loadImage("flowers3.png");
}

void draw () { //this section draws the sketch and gives commands for what to do
  background (background);
  frameRate (30);
  cursor (mouseCursor);

  {
    colorUnderMouse=color(hiddenBackground.get(mouseX, mouseY)); // Look for
    colour under mouse in hiddenBackground image & assign mouseX and mouseY

    println(colorUnderMouse); // print line with colour under mouse
```

```

    if ((colorUnderMouse==houseNumber)&&(colorUnderMouse!=prev)) // if you sense
the houseNumber then...

    {
        println("you hit the house!!"); // print line - you hit the house!
        frameRate (1.0); // and use this frame rate
        image(man, 300, 560); // to flash up this image
    } else if ((colorUnderMouse==sunNumber)&&(colorUnderMouse!=prev)) // else, if
you find the sunNumber then...
    {
        println("you hit the sun!!"); // print line you hit the sun
        frameRate (1.0); //and use this frame rate
        image(cloud, 450, 50); // to flash up this image
    } else if ((colorUnderMouse==flowerNumber)&&(colorUnderMouse!=prev)) // else,
if you find the flowerNumber then...

    {
        frameRate (1.0); //and use this frame rate
        image(flower, 370, 540); // to flash up this image
    }
    prev = colorUnderMouse; // when you're done looking go back to the previous
value and keep looking
}
}

```

Appendix 4: CYRM Questionnaires

Ayabar Nahk

Questionnaire 1 – Completed November 1, 2014

THE RESEARCH SUMMARY - CYRM - YOUTH QUESTIONNAIRE.pdf 2014-10-29 2:28 PM

AYABAR NAHK.
14.

Nov. 1

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Participant Number:
Site ID:
Data number:
Date of administration:

Ayabar Nahk **Child and Youth Resilience Measure (CYRM)**

DIRECTIONS

Listed below are a number of questions about you, your family, your community, and your relationships with people. These questions are designed to help us better understand how you cope with daily life and what role the people around you play in how you deal with daily challenges.

There are no right or wrong answers.

SECTION A:

Please complete the questions below.

1. What is your date of birth? _____
2. What is your sex? Female
3. What is the highest level of education you have completed? grade 9
4. Who do you live with? My parents and 2 Siblings
5. How long have you lived with these people? My whole life
6. How many times have you moved homes in the past 5 years? Only once

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11

Ayabar Nahk

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7. Please describe who you consider to be your family (for example, 1 or 2 biological parents, siblings, friends on the street, a foster family, an adopted family, etc.).

My mom and dad, and my 2 younger siblings.

8. People are often described as belonging to a particular racial group. To which of the following group(s) do you belong? (Mark or check the one(s) that best describe(s) you.)

- ☐ Aboriginal or Native
☒ South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)
☐ South-East Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese)
☐ West Asian to Middle Eastern (e.g., Armenian, Egyptian, Iranian, Lebanese)
☐ Asian (e.g., Korean, Chinese, Japanese)
☐ Black (e.g., African or Caribbean descent)
☐ White or European
☐ Filipino
☐ Latin American (e.g., Mexican, South American, Central American)
☐ Other (please specify): _____
☐ Mixed Race (please list all groups that apply): _____

9. People are often described as belonging to a particular ethnic or cultural group(s). (For example, Chinese, Jamaican, German, Italian, Irish, English, Ukrainian, Inuit, East Indian, Jewish, Scottish, Portuguese, French, Polish, Vietnamese, Lebanese, etc.) To which ethnic or cultural group(s) do you see yourself belonging? Please list as many groups as you want.

East Indian, I'm bengali

Ayabar Nahk



12

SECTION B:

To what extent do the statements below describe you?

Circle one answer for each statement.

	1. Not at all	2. A little	3. Some-what	4. Quite a Bit	5. A lot
1. Do you have access to technology? (like computers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2. Are you able to avoid being bullied?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3. Are you happy with where you are in your life right now?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4. When you're on your way to work or school do you feel safe?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5. Are you a positive influence on people around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6. Do your parents, or guardians, want to know exactly where you are and what you're doing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7. Do you feel good about who you are?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
8. Do you feel that you, or people like you, are represented in the media? (on TV, radio, in movies and magazines etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
9. So you feel good about the choices you make?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10. Are you involved in activities or hobbies that you enjoy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
11. Do you feel that others respect you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
12. So you feel comfortable voicing your opinions and ideas?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
13. Do you feel that there is too	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

much violence on TV, in the movies,
in video games etc?

Ayabar Nahk



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OPTION 2: SECTION C

To what extent do the sentences below describe you? Circle one answer for each statement.

	No	Sometimes	Yes
1. I have people I want to be like	No	Sometimes	Yes
2. I share/cooperate with people around me	No	Sometimes	Yes
3. Getting an education is important to me	No	Sometimes	Yes
4. I know how to behave/act in different situations (such as school, home and church)	No	Sometimes	Yes
5. My parent(s)/caregiver(s) watch me closely, they know where I am and what I am doing most of the time	No	Sometimes	Yes
6. I feel that my parent(s)/caregiver(s) know a lot about me (for example, who my friends are, what I like to do)	No	Sometimes	Yes
7. There is enough to eat at home when I am hungry	No	Sometimes	Yes
8. I try to finish activities that I start	No	Sometimes	Yes
9. Spiritual beliefs are a source of strength for me (for example, believing in a God or Allah)	No	Sometimes	Yes
10. I am proud of my ethnic background (for example, I know where my family comes from or know about my family's history)	No	Sometimes	Yes
11. People think I am fun to be with	No	Sometimes	Yes
12. I talk to my family about how I feel (for example when I am hurt or sad)	No	Sometimes	Yes
13. When things don't go my way, I can fix it without hurting myself or other people (for example hitting others or saying nasty things)	No	Sometimes	Yes
14. I feel supported by my friends	No	Sometimes	Yes
15. I know where to go to get help	No	Sometimes	Yes
16. I feel I belong at my school	No	Sometimes	Yes
17. I think my family cares about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	Yes
18. I think my friends care about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	Yes
19. I am treated fairly	No	Sometimes	Yes
20. I have chances to show others that I am growing up and can do things by myself	No	Sometimes	Yes
21. I know what I am good at	No	Sometimes	Yes
22. I participate in religious activities (such as church, mosque)	No	Sometimes	Yes

23. I think it is important to help out in my community	No	Sometimes	<input checked="" type="radio"/> Yes
24. I feel safe when I am with my family	No	Sometimes	<input checked="" type="radio"/> Yes
25. I have chances to learn things that will be useful when I am older (like cooking, working, and helping others)	No	Sometimes	<input checked="" type="radio"/> Yes
26. I like the way my family celebrates things (like holidays or learning about my culture)	No	Sometimes	<input checked="" type="radio"/> Yes
27. I like the way my community celebrates things (like holidays, festivals)	No	Sometimes	<input checked="" type="radio"/> Yes
28. I am proud to be a citizen of <u>Canada</u> (insert country)	No	Sometimes	<input checked="" type="radio"/> Yes

1. Ungar, M., and Liebenberg, L. (2011). Assessing resilience across cultures using mixed-methods: Construction of the Child and Youth Resilience Measure-28. *Journal of Mixed Methods Research*, 5(2), 126-149.
2. Liebenberg, L., Ungar, M., and Van de Vijver, F. R. R. (2012). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) Among Canadian Youth with Complex Needs. *Research on Social Work Practice*, 22(2), 219-226.



Ayabar Nahk

Questionnaire 2 – Completed December 18, 2014

Dec 18

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Data number:
Date of administration:

Child and Youth Resilience Measure (CYRM)

Ayabar Nahk

DIRECTIONS

Listed below are a number of questions about you, your family, your community, and your relationships with people. These questions are designed to help us better understand how you cope with daily life and what role the people around you play in how you deal with daily challenges.

There are no right or wrong answers.

SECTION A:

Please complete the questions below.

1. What is your date of birth? _____
2. What is your sex? Female
3. What is the highest level of education you have completed? Grade 8, and grade 10 or high school.
4. Who do you live with? My parents, and my two siblings
5. How long have you lived with these people? All my life.
6. How many times have you moved homes in the past 5 years? Only twice.



Ayabar Nahk

7. Please describe who you consider to be your family (for example, 1 or 2 biological parents, siblings, friends on the street, a foster family, an adopted family, etc.).

My mom, my dad, my younger brother and sister,
and my best friends.

8. People are often described as belonging to a particular racial group. To which of the following group(s) do you belong? (Mark or check the one(s) that best describe(s) you.)

- ☐ Aboriginal or Native
- ☒ South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)
- ☐ South-East Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese)
- ☐ West Asian to Middle Eastern (e.g., Armenian, Egyptian, Iranian, Lebanese)
- ☐ Asian (e.g., Korean, Chinese, Japanese)
- ☐ Black (e.g., African or Caribbean descent)
- ☐ White or European
- ☐ Filipino
- ☐ Latin American (e.g., Mexican, South American, Central American)
- ☐ Other (please specify): _____
- ☐ Mixed Race (please list all groups that apply): _____

9. People are often described as belonging to a particular ethnic or cultural group(s). (For example, Chinese, Jamaican, German, Italian, Irish, English, Ukrainian, Inuit, East Indian, Jewish, Scottish, Portuguese, French, Polish, Vietnamese, Lebanese, etc.) To which ethnic or cultural group(s) do you see yourself belonging? Please list as many groups as you want.

Bengali, and Canadian.

South Asian



Ayabar Nahk

SECTION B:

To what extent do the statements below describe you?

Circle one answer for each statement. Whoops I checked it...

	1. Not at all	2. A little	3. Some-what	4. Quite a Bit	5. A lot
1. Do you have access to technology? (like computers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2. Are you able to avoid being bullied?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3. Are you happy with where you are in your life right now?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4. When you're on your way to work or school do you feel safe?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
5. Are you a positive influence on people around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6. Do your parents, or guardians, want to know exactly where you are and what you're doing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7. Do you feel good about who you are?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
8. Do you feel that you, or people like you, are represented in the media? (on TV, radio, in movies and magazines etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. So you feel good about the choices you make?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10. Are you involved in activities or hobbies that you enjoy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
11. Do you feel that others respect you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
12. So you feel comfortable voicing your opinions and ideas?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
13. Do you feel that there is too much violence on TV, in the movies, in video games etc?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Ayabar Nahk

OPTION 2: SECTION C

To what extent do the sentences below describe you? Circle one answer for each statement.

	No	Sometimes	Yes
1. I have people I want to be like	No	Sometimes	Yes
2. I share/cooperate with people around me	No	Sometimes	Yes
3. Getting an education is important to me	No	Sometimes	Yes
4. I know how to behave/act in different situations (such as school, home and church)	No	Sometimes	Yes
5. My parent(s)/caregiver(s) watch me closely, they know where I am and what I am doing most of the time	No	Sometimes	Yes
6. I feel that my parent(s)/caregiver(s) know a lot about me (for example, who my friends are, what I like to do)	No	Sometimes	Yes
7. There is enough to eat at home when I am hungry	No	Sometimes	Yes
8. I try to finish activities that I start	No	Sometimes	Yes
9. Spiritual beliefs are a source of strength for me (for example, believing in a God or Allah)	No	Sometimes	Yes
10. I am proud of my ethnic background (for example, I know where my family comes from or know about my family's history)	No	Sometimes	Yes
11. People think I am fun to be with	No	Sometimes	Yes
12. I talk to my family about how I feel (for example when I am hurt or sad)	No	Sometimes	Yes
13. When things don't go my way, I can fix it without hurting myself or other people (for example hitting others or saying nasty things)	No	Sometimes	Yes
14. I feel supported by my friends	No	Sometimes	Yes
15. I know where to go to get help	No	Sometimes	Yes
16. I feel I belong at my school	No	Sometimes	Yes
17. I think my family cares about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	Yes
18. I think my friends care about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	Yes
19. I am treated fairly	No	Sometimes	Yes
20. I have chances to show others that I am growing up and can do things by myself	No	Sometimes	Yes
21. I know what I am good at	No	Sometimes	Yes
22. I participate in religious activities (such as church, mosque)	No	Sometimes	Yes
23. I think it is important to help out in my community	No	Sometimes	Yes
24. I feel safe when I am with my family	No	Sometimes	Yes
25. I have chances to learn things that will be useful when I am older (like cooking, working, and helping others)	No	Sometimes	Yes
26. I like the way my family celebrates things (like holidays or learning about my culture)	No	Sometimes	Yes
27. I like the way my community celebrates things (like holidays, festivals)	No	Sometimes	Yes
28. I am proud to be a citizen of <u>Canada</u> (insert country)	No	Sometimes	Yes

1. Ungar, M., and Liebenberg, L. (2011). Assessing resilience across cultures using mixed-methods: Construction of the Child and Youth Resilience Measure-28. *Journal of Mixed Methods Research*, 5(2), 126-149.

2. Liebenberg, L., Ungar, M., and Van de Vijver, F. R. R. (2012). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) Among Canadian Youth with Complex Needs. *Research on Social Work Practice*, 22(2), 219-226.

Break Free

Questionnaire 1 – Completed November 1, 2014

THE RESEARCH SUMMARY – CYRM – YOUTH QUESTIONNAIRE.pdf

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Child and Youth Resilience Measure (CYRM)

DIRECTIONS

Listed below are a number of questions about you, your family, your community, and your relationships with people. These questions are designed to help us better understand how you cope with daily life and what role the people around you play in how you deal with daily challenges.

There are no right or wrong answers.

SECTION A:

Please complete the questions below.

1. What is your date of birth? _____
2. What is your sex? male
3. What is the highest level of education you have completed? grade 8
4. Who do you live with? Sister, brothers, father, mother
5. How long have you lived with these people? 14 years
6. How many times have you moved homes in the past 5 years? None



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7. Please describe who you consider to be your family (for example, 1 or 2 biological parents, siblings, friends on the street, a foster family, an adopted family, etc.).

Siblings and Parents

8. People are often described as belonging to a particular racial group. To which of the following group(s) do you belong? (Mark or check the one(s) that best describe(s) you.)

- ☐ Aboriginal or Native
- ☒ South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)
- ☐ South-East Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese)
- ☐ West Asian to Middle Eastern (e.g., Armenian, Egyptian, Iranian, Lebanese)
- ☐ Asian (e.g., Korean, Chinese, Japanese)
- ☐ Black (e.g., African or Caribbean descent)
- ☐ White or European
- ☐ Filipino
- ☐ Latin American (e.g., Mexican, South American, Central American)
- ☐ Other (please specify): _____
- ☐ Mixed Race (please list all groups that apply): _____

9. People are often described as belonging to a particular ethnic or cultural group(s). (For example, Chinese, Jamaican, German, Italian, Irish, English, Ukrainian, Inuit, East Indian, Jewish, Scottish, Portuguese, French, Polish, Vietnamese, Lebanese, etc.) To which ethnic or cultural group(s) do you see yourself belonging? Please list as many groups as you want.

Bangladesh



12

Break Free

SECTION B:

To what extent do the statements below describe you?

Circle one answer for each statement.

	1. Not at all	2. A little	3. Some-what	4. Quite a Bit	5. A lot
1. Do you have access to technology? (like computers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2. Are you able to avoid being bullied?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Are you happy with where you are in your life right now?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. When you're on your way to work or school do you feel safe?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5. Are you a positive influence on people around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6. Do your parents, or guardians, want to know exactly where you are and what you're doing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7. Do you feel good about who you are?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
8. Do you feel that you, or people like you, are represented in the media? (on TV, radio, in movies and magazines etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. So you feel good about the choices you make?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
10. Are you involved in activities or hobbies that you enjoy?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Do you feel that others respect you?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. So you feel comfortable voicing your opinions and ideas?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Do you feel that there is too	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

much violence on TV, in the movies,
in video games etc?

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OPTION 2: SECTION C

To what extent do the sentences below describe you? Circle one answer for each statement.

	No	Sometimes	Yes
1. I have people I want to be like	<input checked="" type="radio"/> No	Sometimes	Yes
2. I share/cooperate with people around me	No	Sometimes	<input checked="" type="radio"/> Yes
3. Getting an education is important to me	No	Sometimes	Yes
4. I know how to behave/act in different situations (such as school, home and church)	No	Sometimes	<input checked="" type="radio"/> Yes
5. My parent(s)/caregiver(s) watch me closely, they know where I am and what I am doing most of the time	No	Sometimes	<input checked="" type="radio"/> Yes
6. I feel that my parent(s)/caregiver(s) know a lot about me (for example, who my friends are, what I like to do)	<input checked="" type="radio"/> No	Sometimes	Yes
7. There is enough to eat at home when I am hungry	No	Sometimes	Yes
8. I try to finish activities that I start	No	Sometimes	<input checked="" type="radio"/> Yes
9. Spiritual beliefs are a source of strength for me (for example, believing in a God or Allah)	No	Sometimes	<input checked="" type="radio"/> Yes
10. I am proud of my ethnic background (for example, I know where my family comes from or know about my family's history)	No	Sometimes	<input checked="" type="radio"/> Yes
11. People think I am fun to be with	No	Sometimes	<input checked="" type="radio"/> Yes
12. I talk to my family about how I feel (for example when I am hurt or sad)	<input checked="" type="radio"/> No	Sometimes	Yes
13. When things don't go my way, I can fix it without hurting myself or other people (for example hitting others or saying nasty things)	No	Sometimes	<input checked="" type="radio"/> Yes
14. I feel supported by my friends	No	Sometimes	<input checked="" type="radio"/> Yes
15. I know where to go to get help	<input checked="" type="radio"/> No	Sometimes	Yes
16. I feel I belong at my school	No	<input checked="" type="radio"/> Sometimes	Yes
17. I think my family cares about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	<input checked="" type="radio"/> Yes
18. I think my friends care about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	<input checked="" type="radio"/> Yes
19. I am treated fairly	No	Sometimes	<input checked="" type="radio"/> Yes
20. I have chances to show others that I am growing up and can do things by myself	No	<input checked="" type="radio"/> Sometimes	Yes
21. I know what I am good at	<input checked="" type="radio"/> No	Sometimes	Yes
22. I participate in religious activities (such as church, mosque)	No	Sometimes	<input checked="" type="radio"/> Yes

23. I think it is important to help out in my community	No	Sometimes	<input checked="" type="radio"/> Yes
24. I feel safe when I am with my family	No	Sometimes	<input checked="" type="radio"/> Yes
25. I have chances to learn things that will be useful when I am older (like cooking, working, and helping others)	<input checked="" type="radio"/> No	Sometimes	Yes
26. I like the way my family celebrates things (like holidays or learning about my culture)	No	Sometimes	<input checked="" type="radio"/> Yes
27. I like the way my community celebrates things (like holidays, festivals)	No	Sometimes	<input checked="" type="radio"/> Yes
28. I am proud to be a citizen of <u>Canada</u> (insert country)	No	Sometimes	<input checked="" type="radio"/> Yes

1. Ungar, M., and Liebenberg, L. (2011). Assessing resilience across cultures using mixed-methods: Construction of the Child and Youth Resilience Measure-28. *Journal of Mixed Methods Research*, 5(2), 126-149.
2. Liebenberg, L., Ungar, M., and Van de Vijver, F. R. R. (2012). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) Among Canadian Youth with Complex Needs. *Research on Social Work Practice*, 22(2), 219-226.



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Questionnaire 2 – Completed December 18, 2014

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Child and Youth Resilience Measure (CYRM)

Break Free

DIRECTIONS

Listed below are a number of questions about you, your family, your community, and your relationships with people. These questions are designed to help us better understand how you cope with daily life and what role the people around you play in how you deal with daily challenges.

There are no right or wrong answers.

SECTION A:

Please complete the questions below.

1. What is your date of birth? _____
2. What is your sex? Male
3. What is the highest level of education you have completed? 8
4. Who do you live with? My family
5. How long have you lived with these people? Forever for ever
6. How many times have you moved homes in the past 5 years? never

Break Free

7. Please describe who you consider to be your family (for example, 1 or 2 biological parents, siblings, friends on the street, a foster family, an adopted family, etc.).

2 Parents and 3 Siblings

8. People are often described as belonging to a particular racial group. To which of the following group(s) do you belong? (Mark or check the one(s) that best describe(s) you.)

- ☐ Aboriginal or Native
- ☒ South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)
- ☐ South-East Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese)
- ☐ West Asian to Middle Eastern (e.g., Armenian, Egyptian, Iranian, Lebanese)
- ☐ Asian (e.g., Korean, Chinese, Japanese)
- ☐ Black (e.g., African or Caribbean descent)
- ☐ White or European
- ☐ Filipino
- ☐ Latin American (e.g., Mexican, South American, Central American)
- ☐ Other (please specify): _____
- ☐ Mixed Race (please list all groups that apply): _____

9. People are often described as belonging to a particular ethnic or cultural group(s). (For example, Chinese, Jamaican, German, Italian, Irish, English, Ukrainian, Inuit, East Indian, Jewish, Scottish, Portuguese, French, Polish, Vietnamese, Lebanese, etc.) To which ethnic or cultural group(s) do you see yourself belonging? Please list as many groups as you want.

I am a Muslim

Break Free

SECTION B:

To what extent do the statements below describe you?

Circle one answer for each statement.

	1. Not at all	2. A little	3. Somewhat	4. Quite a Bit	5. A lot
1. Do you have access to technology? (like computers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2. Are you able to avoid being bullied?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Are you happy with where you are in your life right now?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. When you're on your way to work or school do you feel safe?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
5. Are you a positive influence on people around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
6. Do your parents, or guardians, want to know exactly where you are and what you're doing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7. Do you feel good about who you are?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
8. Do you feel that you, or people like you, are represented in the media? (on TV, radio, in movies and magazines etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. So you feel good about the choices you make?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10. Are you involved in activities or hobbies that you enjoy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
11. Do you feel that others respect you?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. So you feel comfortable voicing your opinions and ideas?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Do you feel that there is too much violence on TV, in the movies, in video games etc?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Break Free

OPTION 2: SECTION C

To what extent do the sentences below describe you? Circle one answer for each statement.

	No	Sometimes	Yes
1. I have people I want to be like	<input checked="" type="radio"/> No	<input type="radio"/> Sometimes	<input type="radio"/> Yes
2. I share/cooperate with people around me	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
3. Getting an education is important to me	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
4. I know how to behave/act in different situations (such as school, home and church)	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
5. My parent(s)/caregiver(s) watch me closely, they know where I am and what I am doing most of the time	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
6. I feel that my parent(s)/caregiver(s) know a lot about me (for example, who my friends are, what I like to do)	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
7. There is enough to eat at home when I am hungry	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
8. I try to finish activities that I start	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
9. Spiritual beliefs are a source of strength for me (for example, believing in a God or Allah)	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input type="radio"/> Yes
10. I am proud of my ethnic background (for example, I know where my family comes from or know about my family's history)	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
11. People think I am fun to be with	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
12. I talk to my family about how I feel (for example when I am hurt or sad)	<input checked="" type="radio"/> No	<input type="radio"/> Sometimes	<input type="radio"/> Yes
13. When things don't go my way, I can fix it without hurting myself or other people (for example hitting others or saying nasty things)	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input type="radio"/> Yes
14. I feel supported by my friends	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
15. I know where to go to get help	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input type="radio"/> Yes
16. I feel I belong at my school	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input type="radio"/> Yes
17. I think my family cares about me when times are hard (for example if I am sick or have done something wrong)	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input type="radio"/> Yes
18. I think my friends care about me when times are hard (for example if I am sick or have done something wrong)	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input type="radio"/> Yes
19. I am treated fairly	<input checked="" type="radio"/> No	<input type="radio"/> Sometimes	<input type="radio"/> Yes
20. I have chances to show others that I am growing up and can do things by myself	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input type="radio"/> Yes
21. I know what I am good at	<input checked="" type="radio"/> No	<input type="radio"/> Sometimes	<input type="radio"/> Yes
22. I participate in religious activities (such as church, mosque)	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
23. I think it is important to help out in my community	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
24. I feel safe when I am with my family	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
25. I have chances to learn things that will be useful when I am older (like cooking, working, and helping others)	<input type="radio"/> No	<input checked="" type="radio"/> Sometimes	<input type="radio"/> Yes
26. I like the way my family celebrates things (like holidays or learning about my culture)	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
27. I like the way my community celebrates things (like holidays, festivals)	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes
28. I am proud to be a citizen of <u>Canada</u> (insert country)	<input type="radio"/> No	<input type="radio"/> Sometimes	<input checked="" type="radio"/> Yes

1. Ungar, M., and Liebenberg, L. (2011). Assessing resilience across cultures using mixed-methods: Construction of the Child and Youth Resilience Measure-28. *Journal of Mixed Methods Research*, 5(2), 126-149.

2. Liebenberg, L., Ungar, M., and Van de Vijver, F. R. R. (2012). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) Among Canadian Youth with Complex Needs. *Research on Social Work Practice*, 22(2), 219-226.

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Questionnaire 1 – Completed November 1, 2014

THE RESEARCH SUMMARY – CYRM – YOUTH QUESTIONNAIRE.pdf 2014-10-29 2:28 PM

JUB JUB EXO

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For office use only
Participant Number:
Site ID:
Data number:
Date of administration:

Child and Youth Resilience Measure (CYRM)

Jub Jub Exo

DIRECTIONS

Listed below are a number of questions about you, your family, your community, and your relationships with people. These questions are designed to help us better understand how you cope with daily life and what role the people around you play in how you deal with daily challenges.

There are no right or wrong answers.

SECTION A:

Please complete the questions below.

1. What is your date of birth? _____
2. What is your sex? FEMALE
3. What is the highest level of education you have completed? GRADE 8
4. Who do you live with? MY MOTHER
5. How long have you lived with these people? EVER SINCE I WAS BORN
6. How many times have you moved homes in the past 5 years? TWICE

https://www.dropboxstatic.com/static/javascript/external/pdf-js-66...yB0xDfY55AptFUPf6r6dNx13Wg%26get_preview%3D1&_subject_uid=4837776 Page 1 of 5



Jub Jub Exo

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7. Please describe who you consider to be your family (for example, 1 or 2 biological parents, siblings, friends on the street, a foster family, an adopted family, etc.).

MY MOTHER, 2 SISTERS, 2 BROTHERS AND A FEW
OF MY CLOSE FRIENDS

8. People are often described as belonging to a particular racial group. To which of the following group(s) do you belong? (Mark or check the one(s) that best describe(s) you.)

- ☐ Aboriginal or Native
- ☐ South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)
- ☐ South-East Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese)
- ☐ West Asian to Middle Eastern (e.g., Armenian, Egyptian, Iranian, Lebanese)
- ☒ Asian (e.g., Korean, Chinese, Japanese)
- ☐ Black (e.g., African or Caribbean descent)
- ☐ White or European
- ☐ Filipino
- ☐ Latin American (e.g., Mexican, South American, Central American)
- ☐ Other (please specify): _____
- ☐ Mixed Race (please list all groups that apply): _____

9. People are often described as belonging to a particular ethnic or cultural group(s). (For example, Chinese, Jamaican, German, Italian, Irish, English, Ukrainian, Inuit, East Indian, Jewish, Scottish, Portuguese, French, Polish, Vietnamese, Lebanese, etc.) To which ethnic or cultural group(s) do you see yourself belonging? Please list as many groups as you want.

VIETNAMESE



12

SECTION B:

To what extent do the statements below describe you?

Circle one answer for each statement.

	1. Not at all	2. A little	3. Some-what	4. Quite a Bit	5. A lot
1 Do you have access to technology? (like computers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2. Are you able to avoid being bullied?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Are you happy with where you are in your life right now?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
4. When you're on your way to work or school do you feel safe?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5. Are you a positive influence on people around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6. Do your parents, or guardians, want to know exactly where you are and what you're doing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7. Do you feel good about who you are?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
8. Do you feel that you, or people like you, are represented in the media? (on TV, radio, in movies and magazines etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
9 So you feel good about the choices you make?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10. Are you involved in activities or hobbies that you enjoy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
11. Do you feel that others respect you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
12. So you feel comfortable voicing your opinions and ideas?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
13. Do you feel that there is too	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

much violence on TV, in the movies,
in video games etc?

Jub Jub Exo



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OPTION 2: SECTION C

To what extent do the sentences below describe you? Circle one answer for each statement.

	No	Sometimes	Yes
1. I have people I want to be like	No	Sometimes	Yes
2. I share/cooperate with people around me	No	Sometimes	Yes
3. Getting an education is important to me	No	Sometimes	Yes
4. I know how to behave/act in different situations (such as school, home and church)	No	Sometimes	Yes
5. My parent(s)/caregiver(s) watch me closely, they know where I am and what I am doing most of the time	No	Sometimes	Yes
6. I feel that my parent(s)/caregiver(s) know a lot about me (for example, who my friends are, what I like to do)	No	Sometimes	Yes
7. There is enough to eat at home when I am hungry	No	Sometimes	Yes
8. I try to finish activities that I start	No	Sometimes	Yes
9. Spiritual beliefs are a source of strength for me (for example, believing in a God or Allah)	No	Sometimes	Yes
10. I am proud of my ethnic background (for example, I know where my family comes from or know about my family's history)	No	Sometimes	Yes
11. People think I am fun to be with	No	Sometimes	Yes
12. I talk to my family about how I feel (for example when I am hurt or sad)	No	Sometimes	Yes
13. When things don't go my way, I can fix it without hurting myself or other people (for example hitting others or saying nasty things)	No	Sometimes	Yes
14. I feel supported by my friends	No	Sometimes	Yes
15. I know where to go to get help	No	Sometimes	Yes
16. I feel I belong at my school	No	Sometimes	Yes
17. I think my family cares about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	Yes
18. I think my friends care about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	Yes
19. I am treated fairly	No	Sometimes	Yes
20. I have chances to show others that I am growing up and can do things by myself	No	Sometimes	Yes
21. I know what I am good at	No	Sometimes	Yes
22. I participate in religious activities (such as church, mosque)	No	Sometimes	Yes

23. I think it is important to help out in my community	No	Sometimes	Yes
24. I feel safe when I am with my family	No	Sometimes	Yes
25. I have chances to learn things that will be useful when I am older (like cooking, working, and helping others)	No	Sometimes	Yes
26. I like the way my family celebrates things (like holidays or learning about my culture)	No	Sometimes	Yes
27. I like the way my community celebrates things (like holidays, festivals)	No	Sometimes	Yes
28. I am proud to be a citizen of <u>CANADA</u> (insert country)	No	Sometimes	Yes

1. Ungar, M., and Liebenberg, L. (2011). Assessing resilience across cultures using mixed-methods: Construction of the Child and Youth Resilience Measure-28. *Journal of Mixed Methods Research*, 5(2), 126-149.
2. Liebenberg, L., Ungar, M., and Van de Vijver, F. R. R. (2012). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) Among Canadian Youth with Complex Needs. *Research on Social Work Practice*, 22(2), 219-226.



Jub Jub Exo

16

Questionnaire 2 – Completed December 18, 2014

For office use only
Participant Number:
Site ID:
Data number:
Date of administration:

Child and Youth Resilience Measure (CYRM)**DIRECTIONS**

Listed below are a number of questions about you, your family, your community, and your relationships with people. These questions are designed to help us better understand how you cope with daily life and what role the people around you play in how you deal with daily challenges.

There are no right or wrong answers.

SECTION A:

Please complete the questions below.

1. What is your date of birth? _____
2. What is your sex? FEMALE
3. What is the highest level of education you have completed? GRADE 8
4. Who do you live with? MY MOM
5. How long have you lived with these people? FOREVER
6. How many times have you moved homes in the past 5 years? TWICE

7. Please describe who you consider to be your family (for example, 1 or 2 biological parents, siblings, friends on the street, a foster family, an adopted family, etc.).

My parents, SIBLINGS AND A FEW OF MY
CLOSE FRIENDS.

8. People are often described as belonging to a particular racial group. To which of the following group(s) do you belong? (Mark or check the one(s) that best describe(s) you.)

- ☐ Aboriginal or Native
- ☐ South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)
- ☒ South-East Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese)
- ☐ West Asian to Middle Eastern (e.g., Armenian, Egyptian, Iranian, Lebanese)
- ☐ Asian (e.g., Korean, Chinese, Japanese)
- ☐ Black (e.g., African or Caribbean descent)
- ☐ White or European
- ☐ Filipino
- ☐ Latin American (e.g., Mexican, South American, Central American)
- ☐ Other (please specify): _____
- ☐ Mixed Race (please list all groups that apply): _____

9. People are often described as belonging to a particular ethnic or cultural group(s). (For example, Chinese, Jamaican, German, Italian, Irish, English, Ukrainian, Inuit, East Indian, Jewish, Scottish, Portuguese, French, Polish, Vietnamese, Lebanese, etc.) To which ethnic or cultural group(s) do you see yourself belonging? Please list as many groups as you want.

I BELONG TO: VIETNAMESE ... (I think I'm
KOREAN)
↳ JUST JOKING

SECTION B:

To what extent do the statements below describe you?

Circle one answer for each statement.

	1. Not at all	2. A little	3. Some-what	4. Quite a Bit	5. A lot
1. Do you have access to technology? (like computers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2. Are you able to avoid being bullied?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Are you happy with where you are in your life right now?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
4. When you're on your way to work or school do you feel safe?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5. Are you a positive influence on people around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6. Do your parents, or guardians, want to know exactly where you are and what you're doing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7. Do you feel good about who you are?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
8. Do you feel that you, or people like you, are represented in the media? (on TV, radio, in movies and magazines etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. So you feel good about the choices you make?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10. Are you involved in activities or hobbies that you enjoy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
11. Do you feel that others respect you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
12. So you feel comfortable voicing your opinions and ideas?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
13. Do you feel that there is too much violence on TV, in the movies, in video games etc?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

OPTION 2: SECTION C

To what extent do the sentences below describe you? Circle one answer for each statement.

	No	Sometimes	Yes
1. I have people I want to be like	No	Sometimes	Yes
2. I share/cooperate with people around me	No	Sometimes	Yes
3. Getting an education is important to me	No	Sometimes	Yes
4. I know how to behave/act in different situations (such as school, home and church)	No	Sometimes	Yes
5. My parent(s)/caregiver(s) watch me closely, they know where I am and what I am doing most of the time	No	Sometimes	Yes
6. I feel that my parent(s)/caregiver(s) know a lot about me (for example, who my friends are, what I like to do)	No	Sometimes	Yes
7. There is enough to eat at home when I am hungry	No	Sometimes	Yes
8. I try to finish activities that I start	No	Sometimes	Yes
9. Spiritual beliefs are a source of strength for me (for example, believing in a God or Allah)	No	Sometimes	Yes
10. I am proud of my ethnic background (for example, I know where my family comes from or know about my family's history)	No	Sometimes	Yes
11. People think I am fun to be with	No	Sometimes	Yes
12. I talk to my family about how I feel (for example when I am hurt or sad)	No	Sometimes	Yes
13. When things don't go my way, I can fix it without hurting myself or other people (for example hitting others or saying nasty things)	No	Sometimes	Yes
14. I feel supported by my friends	No	Sometimes	Yes
15. I know where to go to get help	No	Sometimes	Yes
16. I feel I belong at my school	No	Sometimes	Yes
17. I think my family cares about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	Yes
18. I think my friends care about me when times are hard (for example if I am sick or have done something wrong)	No	Sometimes	Yes
19. I am treated fairly	No	Sometimes	Yes
20. I have chances to show others that I am growing up and can do things by myself	No	Sometimes	Yes
21. I know what I am good at	No	Sometimes	Yes
22. I participate in religious activities (such as church, mosque)	No	Sometimes	Yes
23. I think it is important to help out in my community	No	Sometimes	Yes
24. I feel safe when I am with my family	No	Sometimes	Yes
25. I have chances to learn things that will be useful when I am older (like cooking, working, and helping others)	No	Sometimes	Yes
26. I like the way my family celebrates things (like holidays or learning about my culture)	No	Sometimes	Yes
27. I like the way my community celebrates things (like holidays, festivals)	No	Sometimes	Yes
28. I am proud to be a citizen of <u>CANADA</u> (insert country)	No	Sometimes	Yes

1. Ungar, M., and Liebenberg, L. (2011). Assessing resilience across cultures using mixed-methods: Construction of the Child and Youth Resilience Measure-28. *Journal of Mixed Methods Research*, 5(2), 126-149.

2. Liebenberg, L., Ungar, M., and Van de Vijver, F. R. R. (2012). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) Among Canadian Youth with Complex Needs. *Research on Social Work Practice*, 22(2), 219-226.

Appendix 5: Sessional Questionnaires

Ayabar Nahk

document - Sessional Questionnaire for Participants (YOUTH).docx 2014-10-29 2:29 PM

Nov 1

**** Fill this out and hand it right back to Laura please!****

Name: Ayabar Nahk (I'll put your code name on later) Age 14

What was your favourite part of today's workshop?
making the sketchbook design top part thingy

What was your least favourite part of today's workshop?
The survey

What was the biggest challenge today?
making sure I could finish everything on time

Did you learn anything?
Nope

Did you work with any of the other kids on your project?
Nope

If yes, how did that go?

How are you feeling now that we've finished until next week?
GOOD!

What are you looking forward to for next time?
working on the OCAD thing... & or is it called the java thing?

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week 2 Nov 8

Nov 8

** Fill this out and hand it right back to Laura please!**

Name Ayabar Nahk (I'll put your code name on later) Age 14

What was your favourite part of today's workshop?

going outside and talking

What was your least favourite part of today's workshop?

Walking in the rain, my shoes got wet :C

What was the biggest challenge today?

Thinking of what makes us happy, I mean every day we see it, but when we have to think about it we forget.

Did you learn anything?

Being more creative, self pride.

Did you work with any of the other kids on your project?

I took pictures for them >:D

If yes, how did that go?

Bad, my phone keeps getting wet.

How are you feeling now that we've finished until next week?

Good >:D more creative.

What are you looking forward to for next time?

To start working on the computers.

Name AYABAR NAHK (I'll put your code name on later) Age 15

What was your favourite part of today's workshop?

My favourite part was painting my landscape, and talking about Regent Park and the revitalization.

What was your least favourite part of today's workshop?

Messing up with water color... I think I should redo my landscape or at least fix it with acrylic :P

What was the biggest challenge today?

I don't think there was anything challenging on the last workshop.

Did you learn anything?

To express feelings and showing the truth about things through media so people will see or listen to it, rather than letting them have the false image.

Did you work with any of the other kids on your project?

Nope.

If yes, how did that go?

How are you feeling now that we've finished until next week?

Great! Well I still have lots to do, but I want to work hard on my drawings so they look good.

What are you looking forward to for next time?

COOOOOODDDDDIIIIINNGGGG Im so excited to see how my game turns out!!!!

Name AYABAR NAHK Age 14

What was your favourite part of today's workshop?

My favourite part was talking about the fantasy things we want to put in our games. It made me feel creative, like all make believe things doesn't have to only be in our heads, but can be put it into different things. Like this game for example.

What was your least favourite part of today's workshop?

Drawing my fantasy stuff. I knew what I was going to draw, but once I started drawing my mind went blank. So I just created an outline instead.

What was the biggest challenge today?

To make sure my fantasy things fits the games requirements. Especially the reacting part.

Did you learn anything?

No, not really.

Did you work with any of the other kids on your project?

No, well I let them look at my phone for the pictures :D

If yes, how did that go?

Very bad...

Break Free was reading my messages

How are you feeling now that we've finished until next week?

Great! Now that I have my outline and everything planned, I feel I'm very organized, and because of that my game will turn out great. All I have to do now it draw my characters and background.

What are you looking forward to for next time?

COOOOOOOOOOOOOOOOOLOURINGGGGG Im excited to bring my fantasies to lifeeeeee

Skype Dec/0

** Fill this out and hand it right back to Laura please!**

Name Ayabar Nahk ____ (I'll put your code name on later) Age 15

What was your favourite part of today's workshop?

My favourite part was meeting Arthur

What was your least favourite part of today's workshop?

Learning the code... I was very confused.

What was the biggest challenge today?

Trying to follow along what Laura Jub Jub were saying about the code :P

Did you learn anything?

COOCCODE :D I got it after awhile.

Did you work with any of the other kids on your project?

Yes... Well Jub Jub showed me how to add the color blocks.

If yes, how did that go?

Very well.

How are you feeling now that we've finished until next week?

~~Today's our last session~~ I feel sad D':
next week is our last session D''''X

What are you looking forward to for next time?

The showcase! very excited!!!

Dec 13
16/3

** Fill this out and hand it right back to Laura please!**

Name Ayabar Nahk (I'll put your code name on later) Age 15

What was your favourite part of today's workshop?

Doing the code! Processing was frustrating at some parts, but i'm so proud of my work.

What was your least favourite part of today's workshop?

~~the~~ The sizing of the pictures, and where to put them.

What was the biggest challenge today?

To not mess up on processing :3

Did you learn anything?

I learned how to code, and it was pretty easy after awhile.

Did you work with any of the other kids on your project?

Yes helped me.

Jub Jub

If yes, how did that go?

Good :D

How are you feeling now that we've finished until next week?

Today is our last session :(I'm sad

What are you looking forward to for next time?

The showcase! Really excited!

Final Questionnaire – December 18, 2014

Dec/18

** Fill this out and hand it right back to Laura please! **

Name Ayabar Nahk (I'll put your code name on later) Age 15What was your favourite part of the *Create & Grow Strong* workshops?

The talks. When we talked about the revitalization, and when we walked around Resent Park. It felt good to say how I feel.

What was your least favourite part of the *Create & Grow Strong* workshops?

Probably the time... Sorry I was so late most of the time. I had to work quickly on my drawings, and I had to stay up until 3am to finish!

What would you do differently if you were running the workshops?

I would have more weeks :P also more yummy snacks.

Did you learn anything through the workshops? If so, what?

I learned so much! First of all, I learned code which was exciting. Also I acquired new skills. This was a good experience.

Did you have fun at the final party?

YEEEESSSS Alex was so nice and ordered pizza. I'm sad this is the last time I will see Laura :C also the people I talked to was really nice.

Do you feel proud of your project?

YEAH! Everyone loved it! They all said that I had talent which made me feel touched. Also one of the people gave me his card... that's so cool!

Would you recommend the workshops to your friends?

YEAH!-! This workshop was the most best workshop ever. I loved it so much. I felt I was accepted, meaning it wasn't awkward for me at all, & it was nice.

Your ideas and thoughts are really valuable, is there anything else you'd like to share about your experience of Create & Grow Strong?

I loved it so much. I had a really good time. I acquired new skills, interacted with new people, worked really hard on my game, and this was a really good experience. I'm going to miss this a lot. I hope Laura will make a business out of this and me, Julia, and ~~Samreen~~ Zakir will volunteer there. I know this will be really successful in the future.

Break Free

document - Sessional Questionnaire for Participants (YOUTH).docx

2014-10-29 2:29 PM

Nov 1

** Fill this out and hand it right back to Laura please!**

Name Break Free (I'll put your code name on later) Age _____

What was your favourite part of today's workshop?

The part where I ate chocolate

What was your least favourite part of today's workshop?

Cleaning up

What was the biggest challenge today?

Choosing a idea for my cover

Did you learn anything?

No

Did you work with any of the other kids on your project?

No

If yes, how did that go?

How are you feeling now that we've finished until next week?

I am excited

What are you looking forward to for next time?

I don't know

week 2
Nov 8

**** Fill this out and hand it right back to Laura please!****

Name Break Free (I'll put your code name on later) Age 14

What was your favourite part of today's workshop?

going outside

What was your least favourite part of today's workshop?

drawing and thinking of ideas

What was the biggest challenge today?

thinking of ideas and drawing

Did you learn anything?

No

Did you work with any of the other kids on your project?

Yes

If yes, how did that go?

it was fun

How are you feeling now that we've finished until next week?

Kinda tired and bored but I liked it

if you know what I mean

What are you looking forward to for next time?

Eating food. bring Shavers I get hungry!!

Nov ~~21~~ 22

** Fill this out and hand it right back to Laura please! **

Name Break Free (I'll put your code name on later) Age 14

What was your favourite part of today's workshop?

when we got together and started on our art

What was your least favourite part of today's workshop?

Not getting food

What was the biggest challenge today?

thinking of drawing something

Did you learn anything?

that when you start to draw you can never really find a way to finish it you will always have more ideas to put on

Did you work with any of the other kids on your project?

yes we got together and worked

If yes, how did that go?

fun

How are you feeling now that we've finished until next week?

happy

What are you looking forward to for next time?

food

29

** Fill this out and hand it right back to Laura please! **

Name _____ Break Free _____ (I'll put your code name on later) Age 14

What was your favourite part of today's workshop?

eating food it was good thanks

What was your least favourite part of today's workshop?

Cleaning up

What was the biggest challenge today?

to create more artwork

Did you learn anything?

yes that pastel colors can blend in

Did you work with any of the other kids on your project?

Nope I mean kinda we were all talking about our work again

If yes, how did that go?

it was fun and interesting

How are you feeling now that we've finished until next week?

Confused and happy and yes

What are you looking forward to for next time?

more food

Dec 13

** Fill this out and hand it right back to Laura please! **

Name Break Free (I'll put your code name on later) Age 14

What was your favourite part of today's workshop?

Working and eating

What was your least favourite part of today's workshop?

Working

What was the biggest challenge today?

making the art work turn in to a game and make it work

Did you learn anything?

yes how to use the machine

Did you work with any of the other kids on your project?

yes we all helped each other on our code

If yes, how did that go?

really well

How are you feeling now that we've finished until next week?

kinda frustrated

What are you looking forward to for next time?

there is no next time

Final Questionnaire – December 18, 2014

Dec/8

** Fill this out and hand it right back to Laura please! **

Name

Break Free

(I'll put your code name on later) Age 14

What was your favourite part of the *Create & Grow Strong* workshops?

The Food and making theatre

What was your least favourite part of the *Create & Grow Strong* workshops?

the cooking

What would you do differently if you were running the workshops?

more food

Did you learn anything through the workshops? If so, what?

that art and creativity comes in
many different ways

Did you have fun at the final party?

Yea kinda

Do you feel proud of your project?

Yeg

Would you recommend the workshops to your friends?

Yes for some

Your ideas and thoughts are really valuable, is there anything else you'd like to share about your experience of Create & Grow Strong?

That working on creative can
help explore the mind

Jub Jub Exo

document - Sessional Questionnaire for Participants (YOUTH).docx

2014-10-29 2:29 PM

Nov 1

** Fill this out and hand it right back to Laura please!**

Name Jub Jub Exo 'I'll put your code name on later) Age 14

What was your favourite part of today's workshop?

When we started ~~to~~ designing our sketch books.

What was your least favourite part of today's workshop?

Nothing

What was the biggest challenge today?

Nothing.

Did you learn anything?

Nothing.

Did you work with any of the other kids on your project?

Yes.

If yes, how did that go?

It was fun since they are my friends

How are you feeling now that we've finished until next week?

I feel like this project will be very fun!!! ☺

What are you looking forward to for next time?

To show my final art piece.

Week 2
Nov 8

**** Fill this out and hand it right back to Laura please! ****

Name Jub Jub Exo I'll put your code name on later! Age 14

What was your favourite part of today's workshop?

When we got to walk around the neighborhood and start our sketches.

What was your least favourite part of today's workshop?

not having any food

What was the biggest challenge today?

Picking a Scenario for our sketches

Did you learn anything?

I learned about WW2 and other types of historic stuff

Did you work with any of the other kids on your project?

We took pictures together

If yes, how did that go?

It went well because we shared the camera

How are you feeling now that we've finished until next week?

I feel happy and sad because we don't have a session next week.

What are you looking forward to for next time?

To bringing our sketches on the computer

**** Fill this out and hand it right back to Laura please!****

Name _____ **JUB JUB EXO** _____ (I'll put your code name on later)
Age _____ **14** _____

What was your favourite part of today's workshop?

My favourite part was when we got to use water colours and other supplies to draw our characters and reactions.

What was your least favourite part of today's workshop?

Nothing

What was the biggest challenge today?

Biggest challenge was when we had to catch up.

Did you learn anything?

I learned that if you are really motivated, you can get anything done.

Did you work with any of the other kids on your project?

Not really, it was an independent project.

If yes, how did that go?

How are you feeling now that we've finished until next week?

I feel like I'm ready to start on the code!

What are you looking forward to for next time?

To start importing the pictures in.

Dec 6

** Fill this out and hand it right back to Laura please! **

Name Jub Jub Exo (I'll put your code name on later) Age 14

What was your favourite part of today's workshop?

We got to edit our images.

What was your least favourite part of today's workshop?

~~Nothing~~ Finding out that we were really behind.

What was the biggest challenge today?

Trying to get everything done.

Did you learn anything?

How to use Adobe photoshop.

Did you work with any of the other kids on your project?

Not really.

If yes, how did that go?

How are you feeling now that we've finished until next week?

I'm feeling excited because I caught up a lot.

What are you looking forward to for next time?

I'm looking forward to finish my editing pictures.

Skype

**** Fill this out and hand it right back to Laura please! ****

Name Jub Jub Exo (I'll put your code name on later) Age 17

What was your favourite part of today's workshop?

We got to catch up on the lesson on
skype.

What was your least favourite part of today's workshop?

I don't know.

What was the biggest challenge today?

Getting Gimp to work on my dumb
laptop. :((

Did you learn anything?

I learned that you would need to nest
long codes because it's a lot to process (haha processing
did you get the joke?) :))

Did you work with any of the other kids on your project?

I worked with Rabaya.

If yes, how did that go?

It was fun because we tried to solve
stuff together.

How are you feeling now that we've finished until next week?

I feel sad because Gimp was acting
up, but I feel hopeful since I know how to
add colours to my background.

What are you looking forward to for next time?

I'm looking forward to finish my
final piece!!

Dec/13

** Fill this out and hand it right back to Laura please! **

Name Jub Jub Exo _ (I'll put your code name on later) Age 14

What was your favourite part of today's workshop?

Finishing my final product.
I feel goooooood!

What was your least favourite part of today's workshop?

Technical difficulties

What was the biggest challenge today?

Getting everything to work

Did you learn anything?

Processing is frustrating.

Did you work with any of the other kids on your project?

I helped out my peers.

If yes, how did that go?

It was a fun teaching experience.

How are you feeling now that we've finished until next week?

I FEEL SO GOOD !!

What are you looking forward to for next time?

Seeing it at OCAD 

Final Questionnaire – December 18, 2014

** Fill this out and hand it right back to Laura please! **

Name Jub Jub Exo _ (I'll put your code name on later) Age 14

What was your favourite part of the *Create & Grow Strong* workshops?

My favourite part of the workshops is getting to express my creativity in technology.

What was your least favourite part of the *Create & Grow Strong* workshops?

NOTHING!

What would you do differently if you were running the workshops?

I would make more workshops ☺

Did you learn anything through the workshops? If so, what?

I learned how to program in processing and I learned that I have skills in other things if I put effort into it.

Did you have fun at the final party?

I had a lot of fun because I got to show my work and I got a business card, possibly could get a job.

Do you feel proud of your project?

I feel really proud because my peers and I got a lot of recognition.

Would you recommend the workshops to your friends?

I would totally!

Jub Jub Exo

Your ideas and thoughts are really valuable, is there anything else you'd like to share about your experience of Create & Grow Strong?

It made me think more about the revitalization of Regent Park and how it affected me. This project made me express on how I felt about the revitalization.

Appendix 6: Artist Statements & Participant Works

Ayabar Nahk



Fiction and Non-Fiction in Holimpur

Ayabar Nakh, 2014.

This game a reflection of what I love the most. It has both fictional and non-fictional aspects. I have chosen these pictures because of great memories, because it changed my life for the better, or simply because I thought it would look badass.

For my non-fictional elements, my cursor is my cat. I chose my cat because she changed me and my brother's relationship for the better. Before we adopted our cat, me and my brother would barely talk, and we hated each other a lot. After we adopted the cat, something sparked. Our bond changed from hate, to love. Now we talk almost everyday.

My background is a lake. This lake has so many precious memories. It was in Holimpur, Bangladesh in a village. Even though the village wasn't nice as the city, I loved this place to death because to me it's not really the money that matters but the people, and I had such wonderful friends and family in Holimpur. This lake had a dock, so people would arrive and depart from Holimpur, but it also had a beautiful view. This dock is where I laughed, I cried, I cheered and more. The last non-fictional elements I chose are my best friends. One is flying in the air (this friend in particular is funny and crazy so I made her fly :P), another is going to belly flop to the water, and the last is just sticking her head out the water. These three friends were there for me when I went through hardships, and lived some of the best moments I've had in my life with me.

As for my fictional elements, I have a few characters from the Hunger Games and from the Walking Dead. I chose the Hunger Games because it's my favourite book series, and the first book series that I would actually call myself a fan of. When I was little, I liked some book series, but I wouldn't call myself a fan of them. The same goes for the Walking Dead. I won't say they helped me through hardships, but they just makes my day better.

Even though this game might not make sense, and has the most random things possible, I hope people understand that creativity doesn't always have to make sense. This quote explains it really well "Passion is one great force that unleashes creativity, because if you're passionate about something, you're more willing to take risks." - Yo-Yo Ma. I'm really passionate about the things I put in my game, even if it means to have a friend flying in the air, and zombies out of nowhere on a dock. As for the workshop, I really enjoyed it. I acquired valuable skills, learned new things, and gained new experiences. I hope next year if Laura decides to make a business out of this, then hopefully me, Julia, and Zakir will be a part of it as well.

Break Free



(dream land)

Break Free, 2014

The art work you see before you is something I would call a (dream land), some where I would love to live and never leave. As you see I have green benches. These represent benches that are made out of grass because I love grass and sitting on it with my friends and relaxing and enjoying time. Below it there is water and I chose water to be in my dream land because water for me is everything. I just love swimming and being in it, it helps me forget of what things are happening around me and lets me be me.

The background is all black and it represents the night sky. The night sky for me is wow. I don't why I really added it but all I know is that I needed to add it in. The gray parts on the top represent a place in the park in the neighbourhood and its one of my favourite places to be because I just feel protected, so I had to add that in.

And you should have noticed the sun by now that's up in the corner for me the sun plays a lot of happiness and fun and I just like the sun in general so I also had to add that in. So that really sums it all up of why I drew my picture the way I wanted to while I was making this I just wanted to add more things in and realised that there is really no ending to a dream land it just keeps on expanding.

Jub Jub Exo



My World vs the Real World

Jub Jub Exo, 2014.

For my piece, I chose a stage scenario because it represents another side of me that nobody knows. The concept of this whole project is to turn the “real life world” that we see every day, into the world that we want it to be. In my perspective, my stage has a calm atmosphere, but behind the “scenes”, there is much more to it. It all started with a paper, pencil and most importantly, motivation. From then on, ideas just couldn’t stop coming at me!

As I added my final touch to my rough copy of my scenario, I couldn’t help but smile, because I was so proud of my art work and I was glad that I put all of my effort into it. Around the third and fourth week of this workshop, we started to use other materials such as watercolours, markers and paint. That’s when everyone started to share their ideas and plans for their projects. I loved listening to other people’s ideas because you get to learn from one another. Different people have different ways of doing things. As I was explaining the significance of my project, I couldn’t help but realize how much Regent Park changed from when I was a kid, till now.

The main reason why I chose the stage is because even though school and the revitalization are affecting me every day, whenever I stand on that stage, I feel like all my stress has gone somewhere else. During the last two sessions, that’s when we got really busy and started editing/ producing our final piece onto Processing. I am not going to lie right now, so I am going to be 100% honest. While I was coding my final draft, I can’t tell you how many times I wanted to scream my lungs off because little things couldn’t work properly. But as I look back it now, I’m actually pretty happy I was going through that because that meant I showed a lot of resilience in myself, instead of giving up on my project. I overcame my barriers and completed my project with satisfaction. I’m proud to say that this project has benefited me a lot, and I would like to give thanks to my peers and Laura helping me through it. Thanks again Laura for showing me what I am capable of and for being one of the best mentors out there!

Appendix 7: REB Approval



Research Ethics Board

October 24, 2014

Dear Laura Stavro-Beauchamp,

RE: OCADU 211 "Create & Grow Strong Workshops at Regent Park Focus Media Centre"

The OCAD University Research Ethics Board has reviewed the above-named submission. The protocol and the consent form dated October 7, 2014 are approved for use for the next 12 months. If the study is expected to continue beyond the expiry date (October 6, 2015) you are responsible for ensuring the study receives re-approval. Your final approval number is **2014-48**.

Before proceeding with your project, compliance with other required University approvals/certifications, institutional requirements, or governmental authorizations may be required. It is your responsibility to ensure that the ethical guidelines and approvals of those facilities or institutions are obtained and filed with the OCAD U REB prior to the initiation of any research.

If, during the course of the research, there are any serious adverse events, changes in the approved protocol or consent form or any new information that must be considered with respect to the study, these should be brought to the immediate attention of the Board.

The REB must also be notified of the completion or termination of this study and a final report provided before you graduate. The template is attached.

Best wishes for the successful completion of your project.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Tony Kerr'.

Tony Kerr, Chair, OCAD U Research Ethics Board

OCAD U Research Ethics Board: rm 7520c, 205 Richmond Street W, Toronto, ON M5V 1V3
416.977.6000 x474

Appendix 8: Installation Documentation

The Console//Console exhibition of DFI graduate thesis work was held at the OCAD U Open Gallery at 49 McCaul Street from April 17-22, 2015. The Create & Grow Strong installation showcased the work of the three participants as part of a single, interactive digital work. This also incorporated digital a coding template and brochures that provided curriculum and contact details in addition to background on the workshops and the thesis research.

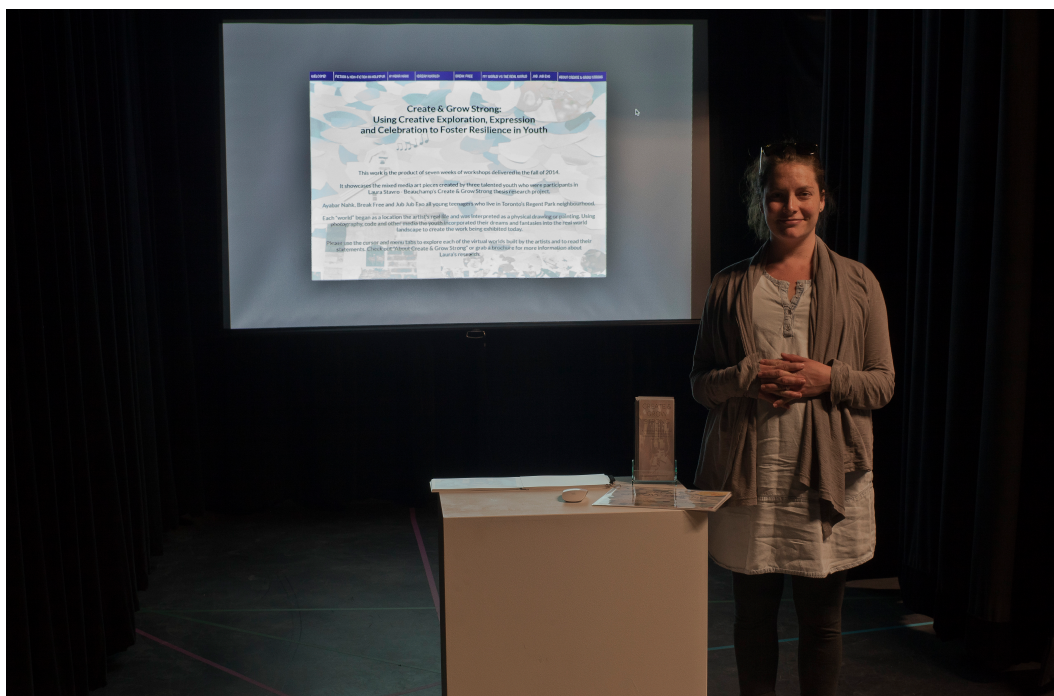


Figure 19: Laura Stavro-Beauchamp and the Create & Grow Strong installation at Console//Console Exhibition. April 17 – 22, 2015.



Figure 20: Create & Grow Strong installation banner from Console//Console exhibition.

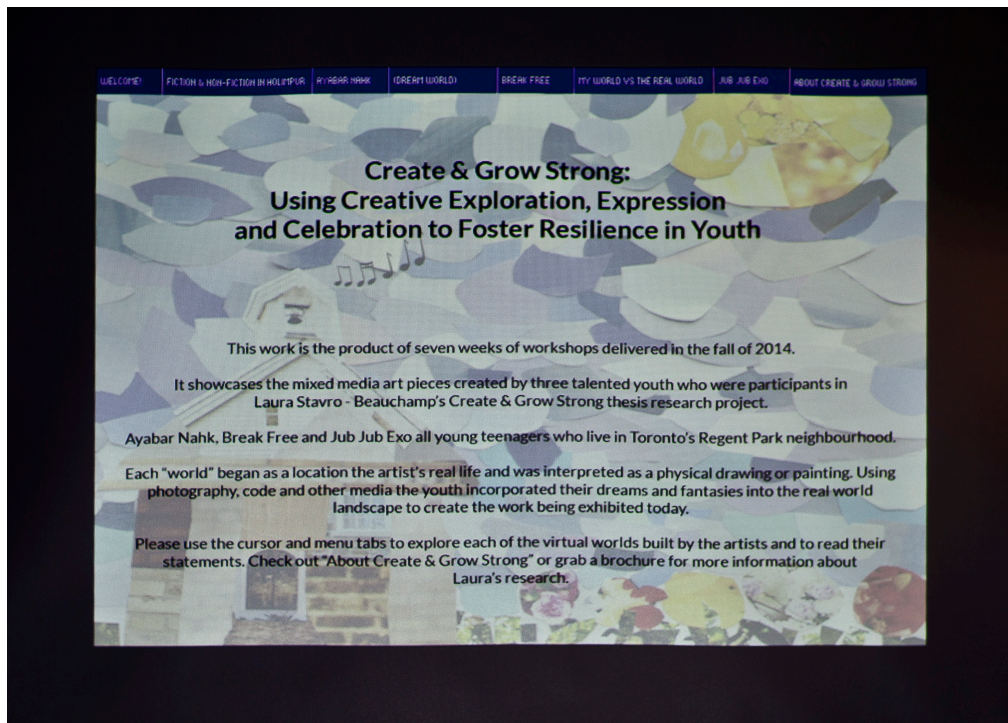


Figure 21: Welcome screen, Create & Grow Strong installation.



Figure 22: Mouse to control Create & Grow Strong installation and curriculum details, coding template and brochures.

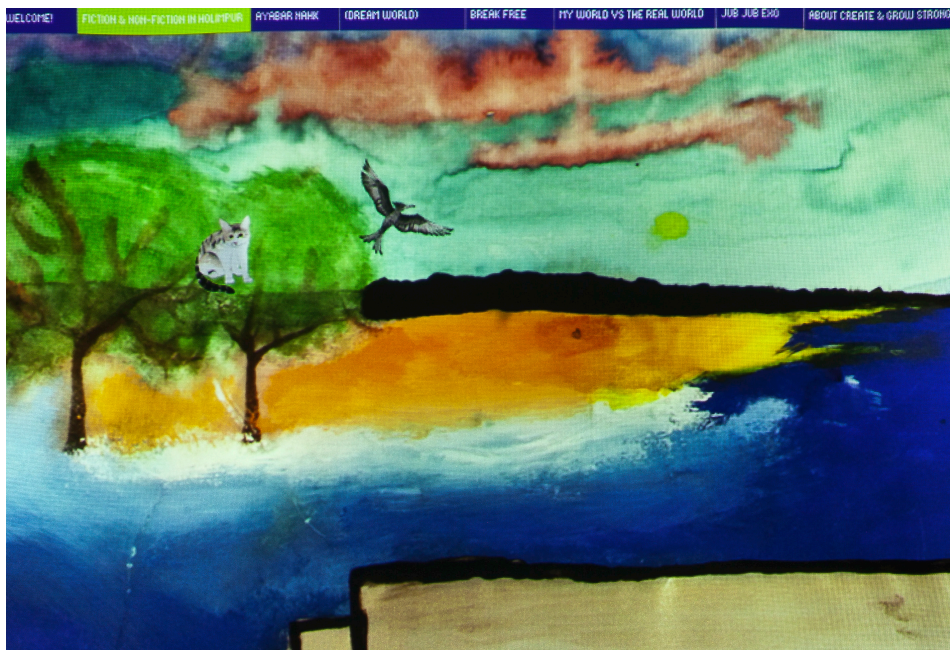


Figure 23: Still image of Ayabar Nahk's digital art piece *Fiction & Non Fiction in Holimpur*

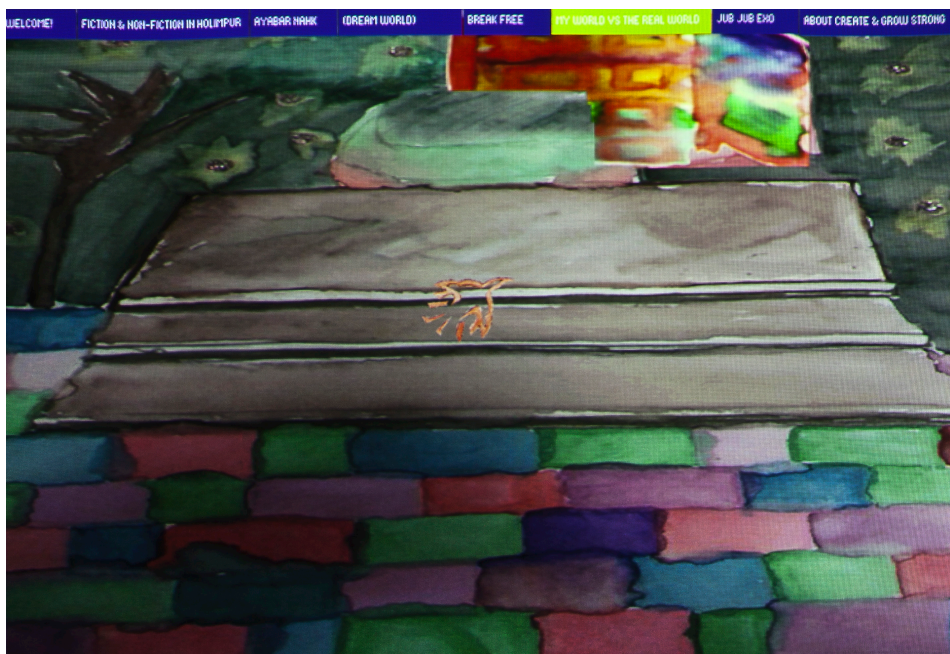


Figure 24: Still image of Jub Jub Exo's digital art piece *My World vs the Real World*

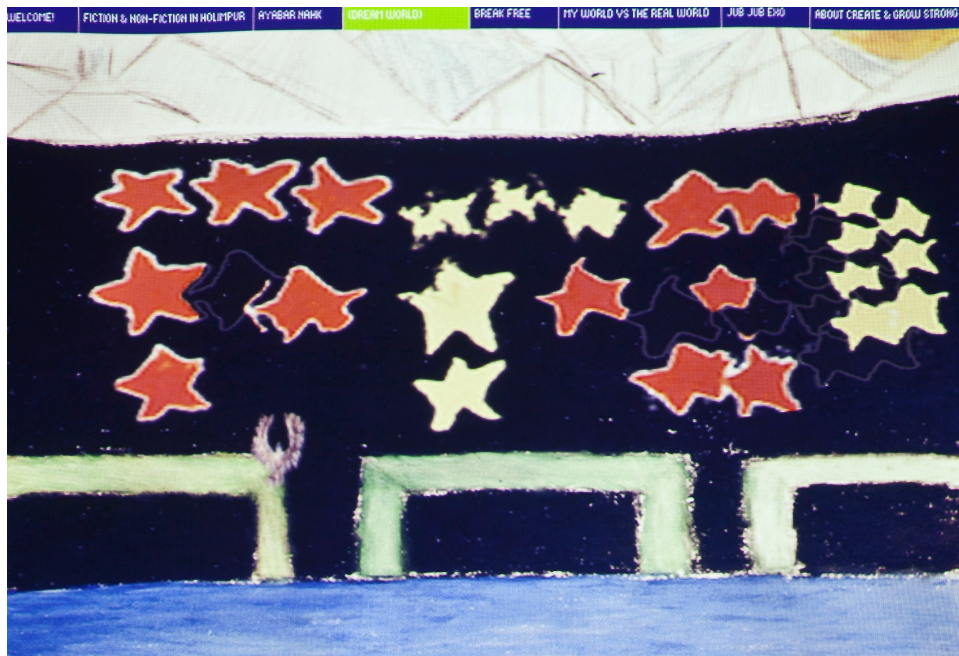


Figure 25: Still image of Break Free's digital art piece (*dream world*)