

CASE STUDIES

INTEGRATING BRAIN STORY SCIENCE



CASE STUDY

CUPS

Integrating Brain Story Science



is a non-profit organization that has been working to improve the lives of Calgary's most vulnerable citizens for the past thirty years. Through integrated healthcare, education, and housing, CUPS and its partners assist adults and families in Calgary living with the adversity of poverty and traumatic events to become self-sufficient. Several years ago, the organization embarked on a journey to integrate brain story science into every level of the organization and used this knowledge to shape the services delivered and the way they were delivered.

The following excerpt from the 2019 Annual Report¹ provides a clear outline of the importance the organization places on brain story science to its operations:

"CUPS is built on the scientific foundation of the Brain Story, which explains how the experiences we have—good and bad— get built into our brains and bodies. It explains why our brain development, especially during childhood, affects our lifelong physical and mental health. Most importantly, it shows us how to build resilience that spans generations.

At CUPS, we apply this scientific knowledge to our vision, our practice and our programs and services. It shapes our Resiliency Matrix, the tool that helps us see the full picture of each client's circumstances, and it informs the integrated care plans we create."

To integrate brain story science, a complete transformation of CUPS organizational structure was required,

fundamentally changing the way services were delivered. Rather than just being an add-on to existing services, it demanded a thorough rethink of their existing goals, a new service delivery model, and the development of an internal culture that would ensure changes were carried out in an optimal way.

The following case study will describe how the organization aligned its strategic direction with brain story science, and point out key factors that contributed to the success of this change. It will describe the challenges faced along the way, and the evaluation methods being developed to understand the impact their work is having on their clients.

HISTORY OF INTEGRATING BRAIN STORY SCIENCE

The journey towards integration of brain story science within CUPS required a thoughtful and purposeful approach. The process started by ensuring that the board of directors understood the relevance of brain science to its clients and operations and what integrating it into the organization would look like. Following that, CUPS leadership used the plain language concepts developed by the FrameWorks Institute² to educate their board members about brain science and resilience. This process took two years to complete.

As this awareness process with board members unfolded, the organization took steps to envision a future where brain story science was the underpinning philosophy of what the



PROGRAMS AND SERVICES

HEALTH CARE SERVICES

Primary health services
Family health services
Dental services

Eye care

Lab work

Liver clinic

Specialist care

Diabetes group

Opioid agonist treatment

Outreach partners

Mental health services

DEVELOPMENTAL RESOURCES

Child Development Centre

ECONOMIC SUPPORTS

Crisis intervention fund Graduated rent program Tax clinics

SOCIAL AND EMOTIONAL SUPPORT

Community development Family development centre Parent education & nurturing parent program

¹ https://www.cupscalgary.com/annual-reports-financials

² https://www.frameworksinstitute.org/early-childhood-development.html

organization did and how it delivered services to adults and families in Calgary living with the adversity of poverty and traumatic events. This process challenged the organization to review and clarify what they aimed to achieve, how they would achieve it, and how they would measure their success.

CUPS used the Innoweave process³ and coaching support to develop: (1) an impact statement – a clear description of the impact CUPS would make when brain story science was integrated; and (2) a theory of change – which outlined how the work of the organization would contribute to the impact statement.

The impact statement, "CUPS builds resilience for life", now grounds the organization in the belief that people are resilient when they can maintain

good health in the face of adversity. CUPS believes brain story science is integral to building and sustaining resilience as the experiences we have shape our brains and affect life outcomes. CUPS believes that anyone can become more resilient with the right supports.

Defining the theory of change using brain story science informed the transformation of what and how programs/services were delivered within the organization and the actions the organization pursued to achieve their impact statement. Through this planning process the organization was in a better position to define what services would be delivered:

"CUPS activities will specialize in helping adults and families progress from being in-crisis and vulnerable to the point where they achieve stability. Our partner agencies will then help participants progress from stability to self-sufficiency."⁴

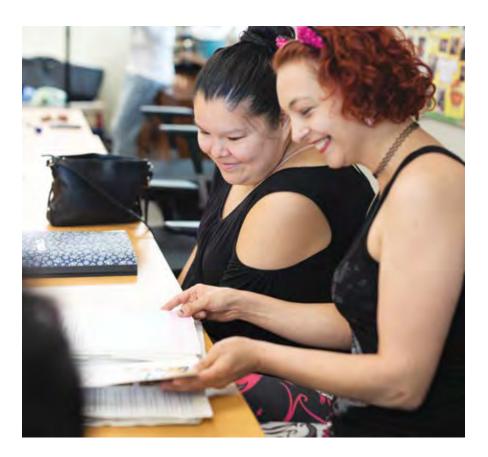
and how they would be delivered:

"Integrated care is a cohesive, individualized care plan that builds and coordinates health, economic, social, emotional and developmental resilience and allows us to apply the brain science of adversity and resilience."

- 3 https://innoweave.ca/streams/impact-andstrategic-clarity/
- 4 Building a Resilient Calgary: How Research, Science, and Policy are Working Together to Eliminate Poverty.

Our work is rooted in the science of brain development but our passion is helping people overcome their challenges and build brighter futures for themselves and their families. Working in close collaboration with research and community partners, CUPS programs are designed to help build resilience and set individuals and families up for lasting success that spans generations."

- Building a Resilient Calgary: How Research, Science, and Policy are Working Together to Eliminate Poverty⁴



The work of defining the impact the organization was seeking and the theory of change informed the development of their 5-year strategic plan which outlines the following six priorities:

- Design programs and partnerships to ensure the clients' progress towards self-sufficiency.
- Align processes and systems to enable the delivery and evaluation of additional integrated programs and partnerships.
- Create an infrastructure to support and increase CUPS effectiveness in application and contribution to the research on the science of brain building and resilience.

- Build an advocating platform in order to lessen the service barriers.
- Strengthen the organizational culture and capacity, aligning internal resources in support of the strategic plan.
- Increase access to and effective use of – diverse resources: funds, space, and volunteers.

Transitioning to an integrated care model represents an ongoing transformational change at CUPS. It has required the organization to evaluate: (1) the needed changes to programs and services in order to create a stress-free environment for people whose core capabilities are challenged; (2) the way the organization

provides positive opportunities for clients to develop and practice these skills; and (3) how the organization helps adults at an individual level, so that those who have faced adverse conditions throughout their lives can self-regulate and build executive function skills. To achieve this, the organization has transitioned from thirteen points of entry to its facilities to just one, in an effort to ensure that its clients only have to tell their story once. This aided in developing a comprehensive plan for each client rather than simply addressing the immediate crisis that may have brought them to the agency's door in the first place, and coordinating services within the organization to address all the areas identified in the integrated service plan.

When he came to CUPS, he wasn't sure what he was seeking—he just knew he needed help. CUPS created an integrated care plan for Stan that improved his mental health and helped him manage his depression. He also received dental work that helped him regain his confidence."

- CUPS staff member



CRITICAL FACTORS FOR SUCCESS

Several key factors contributed to the successful integration of brain story science into the organization.

Leadership

Integrating brain story science at CUPS began with the education of board members and senior leaders, establishing clear steps for implementation, while continually reinforcing the benefits of change and how this aligned with the organization's goals. CUPS also added two new Senior Directors with the skills and experience necessary to carry the organization through a large-scale change process. This has resulted in the establishment of a strong and coherent leadership team.

Change agents among staff

Advancing this work, transforming the organization, and integrating brain story science has been aided by a small number of staff members who were early adopters of the science. They have been instrumental in working with the broader staff group to help them understand the science, why it is important, and how to integrate it into the programs and services CUPS provides, as well as supporting the change process by identifying opportunities and readiness for change, or by purposefully slowing the process down when needed.

Funding

Integrating brain story science and changing how services are delivered required a significant amount of funds over and above the core program



funding the organization receives. Of note, these funds were procured exclusively through private donors. It has allowed the organization to support the implementation of all six of their strategic priorities.

Thoughtful and intentional change management

CUPS used the ADKAR (Awareness, Desire, Knowledge, Ability, Reinforcement) change management model to support the integration of brain story science and the delivery of integrated care. Early in the process, a master plan outlining the steps necessary to transform each aspect of the organization was developed. This plan proved to be too complex to be useful as a tool for staff communications about the change process; it is now used exclusively by senior leaders to determine priority areas for change and how to stage implementation to ensure success.

Leaders have been given the autonomy to pace the change process in a way that will enable success, and also have access to the internal supports needed to create the conditions for positive change.

Access to the Brain Story Certification Course⁵

The Brain Story Certification Course has provided CUPS with access to a resource which ensures all staff working for the organization understand brain story science, can use a consistent language, and can apply this knowledge base to the services they deliver. Requiring that all staff have completed the certification program before their employment begins or shortly after they start has contributed to the strategic priority of "strengthen[ing] the organizational culture and capacity, aligning internal resources with the strategic plan".

Accessing external expertise as needed

CUPS has partnered with the Alberta Family Wellness Initiative, the University of Calgary, the Harvard Center on the Developing Child's Frontiers of Innovation program, and hired external consultants and coaches to support this work. These partnerships and consultants have provided frameworks to guide their thinking, research to ground why the changes are needed and the impact they will have, guidance on how to envision and describe the changes being sought, and expertise to solve problems that were beyond the skills of the organization.

CHALLENGES

When asked to identify some of the most significant factors that have impeded the integration of brain story science into the organization, the following areas were identified.

Sustaining the momentum for change

The ongoing need to reinforce the new goals and activities that change requires with staff needed dedicated time, resources, and perseverance. CUPS leadership did not anticipate the amount of effort and time necessary to support the staff through their change process.



Addressing the issue of client consent in an integrated care model

While it may seem that the issue of client consent is not directly related to brain story science, the desire to provide integrated care across the variety of domains - economic, socialemotional, health, and developmental - requires support from a variety of health and social service providers within the organization. Understanding how client consent impacts service delivery and the development of internal policies and practices was essential to the success of the model. CUPS has developed a Common Consent to Disclose Form that is used during the intake process to address these concerns and encourages the use of the content included in the report, Best Practices for Service Providers: Privacy and Information Sharing⁶, developed by the Canadian Mental Health Association, British Colombia Division.

Integrating information technology systems

CUPS funders require the organization to use independent and varied technology platforms. However, making sure that the information technology systems used within the organization could communicate with one another was crucial in the establishment of one entry point into the organization, management of integrated care planning, service delivery, and providing reports on individual and organizational outcomes. Significant

investments have been made to create a system that allows for the collation of data across different technology platforms.

Evaluation of the change process

Although developmental evaluation represents an integral component of the Innoweave approach and the Frontiers of Innovation's IDEAS Framework⁷, documenting change throughout the ongoing process was challenging given the significant amount of time and expertise required. In hindsight, the organization could have envisioned a way to integrate the process of developmental evaluation with implementation of their strategy for change.

Asking staff to change their practice

CUPS leadership recognized that the process of redefining the services available within the organization would be a challenge for many staff members, hence the use of a well thought-out and intentional change management process. However, telling staff to no longer provide services that fulfill immediate client needs, such as distributing food hampers, and asking them instead to build resilience in their clients by helping them develop their core skills was - and continues to be - difficult. Although CUPS staff have undergone a thorough training in brain story science, applying these concepts in an intentional way that completely redefines their practice is always difficult.



EVALUATION

Evaluating the impact of integrating brain story science has and continues to be a priority for CUPS. Understanding the impact these changes have on individuals and contributing to the accumulating body of research and knowledge on the subject is important to the organization, their partners, and those interested in advancing this work further. The organization has made significant investments in the development of its own Resiliency Matrix.⁸ The Resiliency Matrix provides: (1) a structured way to measure clients' strengths and areas for improvement; (2) a mechanism to support casemanagement for CUPS practitioners, so they can develop integrated care plans for their clients; (3) a method to support intake workers in determining the clients' needs and assist with the creation of referrals to CUPS services and/or partner agencies; and

(4) a standardized approach to conduct follow-up on each client, determining their progress towards self-sufficiency. At an organizational level, the Resiliency Matrix is used as a: (1) management tool for programs and services to determine the best delivery method; (2) measurement tool to demonstrate and communicate the aggregated successes of programs and services in reporting the results to funders, policymakers and the community in general; and (3) a platform to describe the interconnection of policy, practice and research.

The Resiliency Matrix was developed based on the science of the brain story. It is a holistic assessment used to understand what has happened in that individual's life. Assessments at both intake and following the completion of services help to ascertain if CUPS is making a positive impact by supporting individuals towards self-sufficiency.

⁷ https://developingchild.harvard.edu/innovation-application/innovation-approach/

⁸ https://www.cupscalgary.com/impact/resiliency-matrix

CUPS has invested in testing the validity and reliability of the tool as well as in developing a standardized protocol to support its use – including a script for intake workers both within and outside of the organization. The following results were reported in the 2019 Annual Report:

- CUPS has completed 5,826
 Resiliency Matrix assessments
 to date.
- The number of Resiliency Matrices completed (intake and the followup) for the 2018-2019 fiscal year totals 2,633.
- Ninety percent of the clients scored "vulnerable" at intake on their resiliency score.
- On average, clients who accessed CUPS programs and services moved from a Resiliency Matrix score of two (vulnerable) at intake to a score of three (stable) at follow-up assessments.

Next steps will ensure that staff behaviour and the services they deliver are consistent with brain story science, enabling better understanding of how CUPS services can be improved. The following themes will inform future evaluation efforts:

- Continuing research to refine the effectiveness and use of the Resiliency Matrix.
- Trying to understand the connections between client changes measured through existing assessment/reporting tools and the Resiliency Matrix, ultimately trying to understand whether any of these tools can be decommissioned.

 Currently the organization uses 26 assessment tools across the services they provide. Some of these tools are required by funders.
- Using the Resiliency Matrix data to identify, inform, and report on quality improvement initiatives.

- Identifying how individual and organizational impacts are a direct result of the programs and services offered at CUPS.
- The impact the organization's outcomes are having on community partners.

The ultimate goal is for CUPS to determine for whom their array of in-house services work well and for whom they do not.





BLACKPOOL BETTER START

Integrating Brain Story Science into Policy, Practice and Evaluation



Better Start is an early childhood initiative in the United Kingdom (U.K.) which aims to "improve the life chances of babies and very young children by delivering a significant increase in the use of preventative approaches in pregnancy and the first three years of life." The National Lottery Community Fund has invested £215m over 10 years (2015-2025) across five sites in England including: Blackpool, Bradford, Lambeth, Nottingham, and Southend-on-Sea. These geographical areas were chosen due to high levels of need in terms of deprivation, educational achievement, and child health.

The Better Start Partnership in Blackpool has been awarded £45m. The National Society for the Prevention of Cruelty to Children (NSPCC) is the body accountable for these funds. The partnership led by the Centre for Early Child Development (CECD) is made up of the NSPCC, Blackpool Council, Blackpool Teaching Hospitals, NHS Foundation Trust, Blackpool Clinical Commissioning Group, police, and the community. Blackpool Better Start (BBS) is focused on prenatal through children aged 0 – 4.

The BBS funding is being used to develop and test new approaches and to enhance existing services to improve three key childhood outcomes²:

- Social and emotional development preventing harm before it happens (including abuse and/or safeguarding, neglect, perinatal mental health, and domestic violence) and promoting good parent-child attunement and attachment.
- 2. Communication, speech, and language development developing skills in parents to talk, read and sing to, and particularly to praise their babies and toddlers and to ensure local childcare services emphasize language development.
- **3. Diet and nutrition** encouraging early breastfeeding and promoting good nutritional practices.

In addition to these, a fourth outcome that guides this work is service transformation. Efforts are being undertaken to change the way services are delivered and the way in which they are commissioned with parents and families.



OVERVIEW

"Blackpool Better Start's strategy focuses on reducing critical pressures on families, like drugs and alcohol, mental ill health, domestic abuse, and social isolation. It also helps with building parenting knowledge and skills, and working on parent-child relationships. The partnership offers a range of services to improve local support for children and families. This includes: redesigning the health visiting service using the latest evidence of what works; introducing Baby Steps, a universal, perinatal education programme for parents and the Survivor Mums Companion, a programme to support pregnant women who have a history of childhood trauma. The partnership is also developing parks and libraries so parents have safe public spaces designed around babies and very young children. These are activities such as Fathers Reading Every Day (FRED) and outdoor play supported by trained early years Park Rangers. There is also an effort to improve children's oral health through supervised toothbrushing and collaborating with local dentists."

> -A Better Start Programme Leaflet

¹ The National Lottery Community Fund. https://www.tnlcommunityfund. org.uk/funding/strategic-investments/a-better-start

² A Better Start: The Warwick Consortium Evaluation. https://www.abetterstart.org.uk/content/about-programme

The CECD³ is the "engine room" of the partnership. The CECD leads the strategic planning and program delivery associated with BBS. The CECD is comprised of 50 staff. The following cornerstones guide their work ^{4,5}:

• A public health approach -

The CECD works with national and international experts to identify where local expertise can be built upon to reduce harmful behavior, identify actions that reduce barriers and critical pressures impacting families and that help them reach their full potential, and deliver universal campaigns on brain story science and targeted interventions/programs.

Evidence-based intervention –

The CECD considers the latest global innovation and research in developing new services that address critical gaps, looks to provides interventions that have been successfully developed and implemented elsewhere, and uses a staged approach to implementation.

transformation – Systems reform is a key component of BBS. The CECD leads and coordinates efforts focused on the introduction and usage of the shared language associated with the core story of brain development and the

Brain Architecture Game⁶ to the community and professionals. It also ensures the workforce communicates this vision to parents and the community, builds a culture of trust and confidence among professionals, and ensures a traumainformed approach is used.

Development – The CECD provides leadership and strategic direction, ensures all partners are actively engaged in the delivery and co-production of services, builds partnerships with national and international experts to bring evidence-based practices and programs to the community, and leads the research and evaluation efforts.

The following case study will describe the major milestones undertaken to support the integration of brain story science into the BBS strategy, identify key factors that have contributed to the success of this work,

note challenges faced, and presents some of the evaluation methods being used to assess the success of using this knowledge.

HISTORY OF INTEGRATING BRAIN STORY SCIENCE

Using brain story science, the core story of brain development narrative, and the associated metaphors developed by the FrameWorks Institute⁷ to reframe the language around early childhood development was a key component of the Blackpool Better Start (BBS) proposal to the National Lottery Community Fund. Prior to being awarded the lottery funding, representatives from Blackpool government agencies attended an international gathering, hosted by the Palix Foundation (the Foundation) on brain story science. This opportunity was noted as a significant milestone in the early days of their project, as it cemented the vision, deepened the team's understanding about what could be achieved by using a

⁷ http://www.frameworksinstitute.org/



³ https://blackpoolbetterstart.org.uk/centre-forearly-child-development/

⁴ Together we are building a better future for Blackpool's Children. Blackpool Better Start.

⁵ https://blackpoolbetterstart.org.uk/centre-forearly-child-development/

⁶ https://dev.thebrainarchitecturegame.com/

common language across sectors, and provided a foundation for their theory of change. The following quote describes the BBS theory of change: "breaking the intergenerational cycle of poor outcomes can be realized by reducing stressors for parents and increasing their capacity and capability to parent."

The Foundation was noted as being very generous about sharing their learnings and resources, as well as providing guidance to the CECD. For example, there have been instances when the CECD has been met with resistance in working with certain professional groups. During these times, the Foundation offered to have key champions from Alberta reach out and speak credibly to their peers in Blackpool about brain story science and the benefits of applying this information into their practice. In addition to the partnership with Foundation, the CECD has also

developed strong partnerships with the Center on the Developing Child at Harvard University', has used their IDEAS Impact Framework^{TM10}, and is the only Harvard Frontiers of Innovation site in the UK.

Once BBS' proposal was accepted, the CECD initiated efforts to reduce the stressors Blackpool parents face and build their capacity and capabilities to support brain development in children. Key actions have included efforts to raise the awareness of brain story science at both a policy and service delivery level. The following section provides examples of this work.

Developed an initial social marketing campaign

The FrameWorks metaphors were adapted for the UK and used on posters and in a public advertising campaign to raise awareness about brain story science and the core story.

Developed and implemented a comprehensive workforce strategy¹¹

Early work in this area involved a "train the trainer" strategy where key individuals from the CECD were trained in the use of the core story of brain development narrative by the FrameWorks Institute. This included social workers, childcare providers, communications staff, and staff from the health system, such as midwives and home visitors. After the initial training was completed, the CECD worked with FrameWorks to adjust the curriculum based on the feedback from participants. The updated training was shorter and focused on the key content that "busy professionals" needed.

- Personal communication with the Merle Davies, Director CECD.
- 9 https://developingchild.harvard.edu/
- 10 https://developingchild.harvard.edu/ innovation-application/innovation-approach/
- 11 https://blackpoolbetterstart.org.uk/trainingand-events/

The partnership [with the Foundation] has really been quite special. After being in Alberta we were able to come back and talk more knowledgably about what this [brain story science] means and how it had been used and how different professionals used it – lawyers in divorce proceedings, police and how it had changed policy and practice. Without it, we would have waivered because we wouldn't have known what we were aiming for. After being in Alberta, we knew where we trying to get to; it made us resolute in what we are doing. We came to Alberta and were blown away and convinced by the story – we knew it would work in Blackpool because of the issues and the trauma [in the community]."

- Director, CECD



The workforce strategy is a comprehensive approach to ensure that professionals from each of the partner organizations understand and apply brain story science. Actions have included:

- Embedding trainers into the health system and police service to train professionals. Over the last 18 months more than 1900 professionals have been trained.
- Developing an e-learning module for access by professionals.
- Using the Brain Architecture
 Game to engage professionals
 and the community in a hands-on
 learning opportunity.
- Embedding the core story into postsecondary institutions to ensure that all students receive this information, and into the specific curriculum of courses focused on health and child development.
- Hosting conferences as an opportunity to share learnings related to this work and brain story science.

Commissioned a redesign of the Health Visiting Service

The Health Visiting Service is a universal program that provides new parents up to five visits with a health visitor to monitor the health and development of their children through age two and a half. In Blackpool, the enhanced service now has eight mandated visits and goes up to the child's fourth birthday. Integrating brain story science was a key component of this redesign and ensured that parents learned about healthy brain development during



each visit and that health visitors used a trauma-informed approach. The changes implemented have resulted in the program being identified as an exemplar for England and the CECD has been commissioned to write the UK standards for trauma in maternity and perinatal infant health services.

Investment in parks, outdoor spaces and the Early Years Park Rangers¹² program

BBS has made a large investment in creating safe and engaging parks and open spaces, as well as established an Early Years Park Ranger program. The park rangers are trained in brain story science and support caregivers to build healthy brains through action in parks and open spaces. For example, they have activity cards to support caregivers when they are at the park with a child. The activity card might include a physical activity, a craft, a nursery rhyme, or games they can play together. Not only does this initiative create opportunities for physical

activity, it is also focused on building parents' and caregivers' skills to support healthy brain development.

Established Community Connectors and Health Connectors¹³

BBS established community connectors and health connectors to link parents and caregivers with community resources and events aimed at families with children under the age of four. Additional roles of the connectors include collecting feedback from parents and caregivers about the programs and services they would like to have available in their community and answering any questions they may have about BBS and its work. The health connectors are focused on support through diet, nutrition, and how to keep fit, as well as accessing the dentist. The connectors also host Brain Architecture Game sessions to build families' understanding of brain story science.

¹² https://blackpoolbetterstart.org.uk/services-for-families/

¹³ https://blackpoolbetterstart.org.uk/community-connectors/

CRITICAL FACTORS FOR SUCCESS

The following factors have contributed to the successful integration of brain story science into BBS.

Buy-in and engagement of the Chief Executives

BBS is governed by an Executive Council that includes a Chief Executive from each of the partner organizations. This leadership has been consistent over the duration of the funding and has a strong understanding of the vision, theory of change, and brain story science. They are advocates for advancing this work and have attended various events with key national and international experts at Harvard's Center on the Developing Child, in Alberta, and at Oxford University.

Partnerships with national and international leaders

Strong partnerships with key national and international leaders in brain story science have shaped the vision of BBS and have influenced the strategies employed, resources used, and the "test and learn" approach to evaluation. One of the senior leaders involved with BBS is currently an expert advisor on the National Association of Directors of Public Health in England. These opportunities support the further integration of brain story science beyond BBS.

Team dedicated to the "test and learn" approach

The CECD has a number of dedicated staff who are responsible for evaluating the effectiveness of the programs and services being delivered by BBS. As a part of this approach, evidence-based programs and services are adapted to make them relevant to the community. For instance, staff worked to ensure the language used in the core story of brain development narrative was appropriate for use in the U.K.

Key champions in partner organizations

Efforts to reframe and transform the system were built on the need to ensure professionals understand the importance of the early years on long-term outcomes and building a culture of trust and confidence. Having key champions in each of the organizations was a critical factor of success in advancing this work.

Volunteers and community engagement

Co-design of programs and services is a foundational component of BBS. Engaging the community in discussions about brain story science, trauma, and the programs and services that are or are not available has resulted in much wider understanding of brain story science and an increased willingness to be involved and advance this work. Many of the volunteers involved with BBS have been involved since the beginning and have become community connectors. They are known by members of their community and are passionate about making a positive change in early childhood outcomes.

The Brain Architecture Game

This activity was described as a "game changer" for educating professionals and families about brain story science as it is interactive, informative, and fun. The game helps professionals understand the relevance of brain story science to their practice and brings home how they could do things



differently. Playing the game with families was adopted using a similar approach taken by a hospital in New York. When used with families the aim, in addition to increasing their understanding of brain story science, is to help parents better understand their own childhood experiences and how this has affected them, and then use this information to reduce their children's chances of experiencing adverse childhood events. Using the brain game with families has been an effective way to engage parents and an opportunity to connect them with the community supports and services they need.

Innovative approaches such as the Community Connectors and the Early Years Park Rangers

The Community Connector program was not a planned initiative of BBS. It was developed in response to the work of BBS volunteers and the importance of having non-professionals readily accessible in the community to connect families and caregivers to professional supports, programs, and services. The Early Years Park Ranger program is an example of how to build capacity and capability in open spaces and parks.

CHAILENGES

The following challenges were identified as factors that impacted the development of workforce capacity and the integration of brain story science into programs and services.

Budget restrictions limiting an organization's ability to implement the workforce strategy

In the last few years, public services in Blackpool experienced budget restrictions that forced them to review their priorities, their services, and how they provide them. This has limited their ability to support the ongoing implementation of the workforce strategy as key leads have not always had time to focus on this work.

Professionals believe they already know brain story science

Certain professionals have been harder to educate because they believe they already know all about brain story science. While some do have a general understanding, the language they use is not consistent with the core story. This resistance to learn about the core story of brain development and use a common language hindered the ability to build trust and confidence among partners, and the goal of using a common language and providing common messaging to parents, families, communities, and key partners.

EVALUATION

The BBS evaluation strategy focuses on understanding the processes used to achieve the Better Start outcomes and fidelity to the core story of brain development. They are currently working with a national group, including experts from Oxford University, to build a data warehouse infrastructure that will allow communitybased data to be collected from parents, families, caregivers, and children to track outcomes over time. The CECD is also working with The Royal Children's Hospital Melbourne, Kids in Communities¹⁴ to understand how different factors in the community, such as the physical environment, social environment, socio-economic factors, access to services, and governance influence the way that children develop. Directly evaluating the impact of integrating brain story science is not the primary focus of BBS evaluation efforts. However, they do track the number of people trained in brain story science to understand their reach. For example, in the past year they have trained approximately 1,900 staff from partner organizations, including 250 members of the police service.

Although not a component of their evaluation strategy, the CECD has noticed that the language being used in the community has changed between the first community consultation that was undertaken at the beginning of their funding and the consultation recently completed. Using a form of Q methodology to assess participants' ways of thinking about issues, the community consultation team has noted that participants are now using the FrameWorks Institute's metaphors, such as "serve and return", in their discussions during the second community consultation process. This is evidence that brain story science is permeating into the community: people are hearing the messages being delivered and are using them to describe their interactions with their children.



Integrating Brain Story Science



he Ministry of Children's Services "leads child care and intervention, early childhood development, foster and kinship care, adoption and improvements for children and youth." They provide key funding for a range of programs and services designed to protect Alberta's children, support early childhood development, and support youth transitioning from care into adulthood.

Brain story science is an integral component of the work of the Ministry and reflected in key documents that guide its work. The foundation for brain story science was established in the 2018-2021 Children's Services Business Plan². In this plan, brain story science was included in the strategic context which shaped the work of the Ministry, and in the outcomes and key strategies which have guided the work of the Ministry. Including brain story science helped shaped the priorities of the Ministry and their focus on ensuring Albertans are supported in creating environments that contribute to healthy brain development. The ongoing commitment to nurturing and enhancing well-being, resilience, and cultural connections of children, youth, and families is evident in the recently released 2019-2022 Children's Services Business Plan³.

Additionally, brain story science has informed the development of key Ministry policy frameworks and action plans, such as Well-Being and Resilience: A Framework for Supporting Safe and Healthy Children and Families⁴ (Well-Being and Resilience Framework), Foundations of Caregiver

Support⁵, and Building Strength, Inspiring Hope: A Provincial Action Plan for Youth Suicide Prevention 2019-2024⁶. These frameworks and plans highlight the importance of brain story science and show how it has influenced the Ministry in its programming and the identification of priority actions for implementation. The following excerpt from the Well-Being and Resilience Framework provides an example of how brain science is being used to guide investments that align with brain story science: "Investing in programs and services that promote healthy environments and positive experiences at critical stages in development (infancy, the early years of childhood, and adolescence) offers the greatest benefit to individuals, families and communities."

At a service delivery level, brain story science influences how staff from the Ministry and from contracted service providers interact with children, youth, and families at Parent Link Centres, Early Learning and Care Centres, and through the supports and services delivered by the Child Intervention system. Staff no longer ask children, youth, and families "what's wrong with you?" but rather ask "what's happened to you?"

The following case study will highlight the influence brain story science has had in the development of key guiding frameworks for the Ministry, the factors that have contributed to brain story science being successfully integrated, and describe the Ministry's evaluation plans.

MINISTRY OF CHILDREN'S SERVICES: KEY SERVICES

Adoption and post adoption

Child care

Getting help for child abuse, neglect, and sexual exploitation

Advancing Futures - Bursary

Child guardianship, foster care, and kinship care

Indigenous caregivers

Alberta Child Benefit

Child intervention

Parent Link Centres

- 1 https://www.alberta.ca/childrens-services.aspx
- 2 https://open.alberta.ca/dataset/cec324e7e339-4254-a3e7-17471adee0d2/ resource/5ace6ae7-7125-45ef-83ce-1c88f1fa5d9f/download/childrens-services.pdf
- 3 https://open.alberta.ca/dataset/cec324e7e339-4254-a3e7-17471adee0d2/ resource/79d12b07-09ab-427c-b9b3-829f1637455b/download/childrens-services.pdf
- 4 https://open.alberta.ca/dataset/520981c4-c499-4794-af55-bc932811cb1e/resource/7fda0ae8-8d97-49e7-b94b-7f0088cd767d/download/well-beingresiliency-framework-march2019.pdf
- 5 https://www.alignab.ca/wp-content/ uploads/2016/10/Foundations-of-Caregiver-Support-June-2015-Final.pdf
- 6 https://open.alberta.ca/dataset/96258654-ed5c-4bb5-809b-717ddcf11dc4/resource/3c368257-c873-41fc-8f89-3f9853d49ec1/download/alberta-youth-suicide-prevention-plan.pdf

EARLY INTERVENTION AND PREVENTION SERVICES

The Ministry of Children's Services has been working to integrate brain story science for over a decade. It has required significant leadership and perseverance. In government, the process of integrating brain story science involved building an organizational understanding of the concepts, the language, and the research, and why the knowledge is important. Prominent leaders in brain story science met with Ministers, Deputy Ministers, and Assistant Deputy Ministers to raise their awareness and understanding of the core story of brain development. Organizational leaders from within the Ministry have attended provincial workshops and have used the language to communicate with cross-Ministry partners and staff. Although not a requirement in prevention and early intervention, all staff are encouraged to take the Brain

Story Certification Course⁷ offered through the Alberta Family Wellness Initiative. As internal capacity has been developed, brain story science has continued to permeate the strategic thinking of the Ministry and the delivery of programs and services. The following section outlines some of the key documents that guide the work of the Ministry's prevention and early intervention services and the influence of brain story science.

In March 2019, the Ministry released three complementary documents to guide its prevention and early intervention work. These documents, the Well-Being and Resilience Framework, the kâ-nâkatohkêhk miyo-ohpikinawâwasowin (miyo) Resource⁸, and the Well-Being and Resilience: Evaluation Framework⁹, are all grounded in brain story science. They outline why brain story science is important and how the programs and services delivered through the Ministry use brain story science to influence

healthy child development. The following sections describe each of these documents.

Well-Being and Resilience Framework: A Framework for Supporting Safe and Healthy Children and Families

The purpose of the framework is to guide the Ministry in enhancing and increasing prevention and early intervention services and supports for infants, children, youth, and families. It articulates the Government of Alberta's approach to prevention and early intervention, defines the wellbeing and resilience model, outlines the key elements of early intervention and prevention services, describes the desired outcomes for prevention and early intervention activities, provides an understanding of how trauma impacts development, and assists in making funding and service delivery decisions. The Well-Being and Resilience Framework "outlines the importance of policies, services, and programs that prevent and/or aim to reduce the impacts of early adversity by promoting the development of wellbeing and resilience." 10 The framework sets the expectation of how services funded by the Ministry will be delivered and the outcomes that are expected. Brain story science has informed both of these areas.



- 7 https://www.albertafamilywellness.org/training
- 8 https://open.alberta.ca/dataset/a0afeba2e180-4f1c-8aa0-68bb1327ff71/resource/ acc8ecfd-00dd-40c2-8c31-36d01656daad/ download/well-being-resiliency-miyoresourcemarch2019.pdf
- 9 https://open.alberta.ca/dataset/7d64cad5f400-4cd3-b7d7-76c3a38ff548/ resource/9d3ebd8c-e52f-4964-971e-828d4c3bf21c/download/well-beingresiliency-fmwk-evaluation-march2019.pdf
- 10 https://open.alberta.ca/dataset/520981c4c499-4794-af55-bc932811cb1e/ resource/7fda0ae8-8d97-49e7-b94b-7f0088cd767d/download/well-beingresiliency-framework-march2019.pdf

As described in the framework, future work to increase well-being and resiliency for Alberta's most vulnerable populations will seek to ensure that prevention and early intervention work:

- Is aligned with current and future Ministry policies and practices.
- Applies an Indigenous and newcomer lens.
- References the Well-Being and Resiliency Framework within contracts and grants.
- Utilizes the Evaluation Framework and/or the miyo Resource for the evaluation of Ministry and/or contracted prevention and early intervention (PEI) programs.
- Monitors progress, discusses
 promising practices, and identifies
 gaps via a provincial committee
 with representation from all service
 delivery regions to ensure equity
 in implementation.

Implementing these actions at a minimum will further integrate brain story science into the contracts and grants awarded by the Ministry and help evaluate the positive outcomes associated with setting priorities aligned with brain story science.

kâ-nâkatohkêhk miyoohpikinawâwasowin (miyo) Resource

The miyo Resource presents foundational beliefs and approaches of Indigenous people to promote well-being and resilience and an evaluative process that honours an Indigenous worldview. The resource concludes with two sections titled, "Incorporating



miyo Principles in the Implementation of the Well-Being and Resilience Framework" and "Program Outcomes and Performance Measures." These sections provide actions to guide this work and ensure the Western description of brain story science is integrated in a meaningful way into the prevention and early intervention programs in Indigenous communities. They also give suggestions for framing evaluation within Indigenous ways of knowing and living. This resource offers an important perspective and assists in framing brain story science for Alberta's Indigenous communities.

Well-Being and Resilience: Evaluation Framework

The Evaluation Framework describes the desired results of the Well-Being and Resilience Framework, indicators and measures for prevention and early intervention services, processes to measure and report on outcomes, and effectiveness of wellbeing and resilience programs provincially.

The theory of change outlined in the Evaluation Framework is based on brain story science and includes the following three interrelated concepts:

- "In Alberta, to ensure infants, children and youth are well, we deliver services in the domains of child development and well-being, caregiver capacity building and resilience and social connections and supports. We believe these are the ingredients families and children need to be well.
- We work in specific ways:
 ensuring delivery is appropriate
 and contextualized to the local
 community; using leading practices,
 practice-based evidence, and
 promising healing practices; and
 informed by all kinds of evidence
 and Indigenous ways of knowing;
 and by understanding we are one
 player in a larger dynamic system.
- We do this because we know that infants, children, and youth are a collectively-held responsibility and that everyone has a key role to play in keeping infants, children, and youth safe."

Using this theory of change and the descriptions of the well-being and resilience activities/services the Ministry delivers, the Evaluation Framework outlines a number of outcomes for individuals and families as well as the system and their associated indicators. Each of the outcome statements are described in detail below. These descriptions provide evidence of how brain story science has influenced this work. The outcomes are:

- "Children and families are more socially connected and linked to supports.
- Parents and caregivers have knowledge about parenting and child development.
- Parents and caregivers are resilient.
- Children experience healthy social and emotional development.
- Services are consistently available, aligned, effective, and accountable.
- Programs are delivered by competent and knowledgeable staff.
- Programs are culturally safe and inclusive."

Next Steps for the Well-Being and Resilience Framework

The next steps for the Well-Being and Resilience Framework include the development of a comprehensive training strategy to ensure staff have the capacity to deliver services in alignment with the concepts in the framework. There are also plans to integrate the Well-being and Resilience Framework into the procurement of prevention and early intervention services, similar to what has been accomplished through the Foundations of Caregiver Support Framework, described below.

CHILD INTERVENTION SUPPORTS AND SERVICES

Child intervention supports and services are delivered through a combination of Ministry staff and contracted service providers. Service providers are contracted by the Ministry to improve the well-being of children, youth, and their families. The child intervention system has fully embraced brain story science and has taken steps to ensure the agencies they contract with provide services that align with brain story science. The following section describes how the Ministry has defined how they want services provided, how they are contracting with agencies to ensure they are delivering services with this vision, and their plans for evaluation.

Foundations of Caregiver Support

Foundations of Caregiver Support was written in 2015. The document outlines the principles, guidelines, and practices the Ministry is seeking in enabling caregivers to support the safety and well-being of infants, children, and youth served by child intervention programs. Brain story science is presented as one of three foundational pillars of knowledge and practice. The others are trauma and its effect on children's healing and behaviour, and loss and grief and their experience on children and youth.

The conclusion of the document outlines the next steps related to Foundations of Caregiver Support, including ensuring: (1) a solid



foundation on the three pillars of knowledge and practice for all individuals who provide day-to-day care to children; (2) infants, children and youth are supported in a manner that acknowledges their unique needs and experiences, including their cultural heritage; (3) infants, children, and youth are provided with a consistent approach in meeting their needs by all significant caregivers; (4) all children of all ages, regardless of their experiences, are valued for their potential to grow, change, and contribute; (5) Aboriginal children and families' experiences are acknowledged and incorporated in practice; (6) caregivers have the tools and support they need to be successful in their roles; and, (7) adult capacity to care for children of all ages is the primary focus of our work.

Since the release of Foundations of Caregiver Support, the Ministry has

undertaken a number of steps to support its implementation. These steps ensure that Ministry staff and contracted service providers are providing services in alignment with the principles and practices described in the document. The Ministry has made significant investments in training Ministry staff and contracted service providers. The Ministry has developed a comprehensive training program for all child intervention staff, and has also contracted with ALIGN Association of Community Services¹¹ to develop and deliver five modules related to caregiver support. Training Ministry staff and contracted service providers has been a five-year process.

In addition to the education and training that has been provided, the Ministry has integrated the principles and practices outlined in Foundations of Caregiver Support into the prequalification process with contracted

service providers. During the prequalification process, agencies must commit to using the knowledge described in Foundations of Caregiver Support (stress/trauma, child and brain development, loss and grief) in their delivery of services. This ensures the services procured align with evidence-based practice and best practice with the aim of improving outcomes for infants, children, youth, and families.

Evaluating Changes Related to the Foundations of Caregiver Support

Evaluative efforts related to Foundations of Caregiver Support are in their infancy. The Ministry has noted the following evaluation efforts:

- Evaluating Foundations of Caregiver Support training –
 - Ensuring that the training provided resulted in understanding and behaviour change will be an important first step as a follow-up to the investments made in training. The Ministry has recently developed a comprehensive evaluation for Child Intervention Core Training (of which Foundations of Caregiver Support is a component). However, the Ministry believes the training has created immediate impact already.
- contracted service providers
 are starting to measure
 outcomes It was noted that
 contracted service providers are
 starting to measure outcomes in
 alignment with Foundations of
 Caregiver Support. In particular,
 Hull Homes and Woods Homes, both
 providers of therapeutic, campus-



based services, are leading the way in helping to define those outcomes and methods for their measurement. Additionally, there are a number of agencies in Calgary and southern Alberta who are starting to measure outcomes in infants. They are using the Infant Mental Health Promotion Program¹² as a basis for the evaluation. This involves using developmental plans and ages and stages measures to work with very young children to try to improve their healthy development.

- Required accountability reporting of contracted service providers will advance the work on measuring outcomes Contracted agencies are accountable for evaluating their outcomes as a requirement of their contract with the Ministry. Foundations of Caregiver Support provides direction in terms of what needs to be provided to children, youth, and their families and how. It is believed that contracted agencies will take the lead on identifying measures that will be used to report on service impacts and meet their accountability requirements.
- The development of an Evaluation Framework that is flexible enough that it can be used by agencies across the province but narrow enough that measurement is focused on outcomes for children, youth, and their families. Measurement might take the form of assessing the three "Rs" (regulation, relationships, and reason) and the contributions they have made to improving development of children and youth. It will be developed in collaboration with contracted service providers.

CRITICAL FACTORS FOR SUCCESS

The following factors have contributed to the successful integration of brain story science into the Ministry.

• Leadership – One of the strengths of efforts to integrate brain story science at the Ministry has been the long-term, consistent leadership by those who have championed this work and understood the most effective ways to make long-term impacts. These leaders were early adopters and remain committed and involved in integrating brain story science into the Ministry's work, their cross-Ministerial work, and their work with community partners.

FACTORS CONTRIBUTING TO SUCCESSFUL INTEGRATION OF BRAIN STORY SCIENCE INTO THE MINISTRY

"It was about leadership, focus, and vision. There were lots of times we had conflict – we just kept plugging away."

"Our framework provides a long-term vision for how to improve the well-being of children and families – then government overlays what they see as priorities."

'Underlying the core or practice piece of child intervention continues regardless of what government is there."

"This is a long-term vision for how we practice and the outcomes we want to achieve."

"The core story [i.e., brain story science] has created a shared language across sectors and brought together policy makers, academics, and practitioners. It is a way to identify common goals."

"Intentional policy-to-practice sessions with staff provide professional learning opportunities that align brain story science and the direction of the Ministry."

"The language is relevant to all sectors – it is a way to bring together across common goals."

- Ministry Staff

- Integrating brain story science into the frameworks that guide the delivery of Ministry programs and services – These frameworks ensure that evidence-informed programs and services are delivered in the community. The development of these frameworks has been a collaborative effort with Ministry staff and community partners, which has increased buy-in and awareness. The Fiscal Plan: A plan for jobs and the economy 2019-2023¹³ includes the following statement which will ensure that brain story science is further integrated into the services funded by the Ministry:
 - "Families will benefit from government spending in prevention and early intervention to support safety, well-being and resiliency for young Albertans. Government procurement of community resources will consider the needs of children, youth, and families at risk. Delivery will be standardized and align with the province's well-being and resiliency model. The transformed model will focus on providing a broad range of services for families with children from birth to 18 years of age."
- Having access to education and training – Having access to the Brain Story Certification Course, including brain story science in the core training of child intervention workers, and mandating that community agencies attend training on the Foundations of Caregiver Support have been essential to building a deeper understanding of this evidence and knowledge.

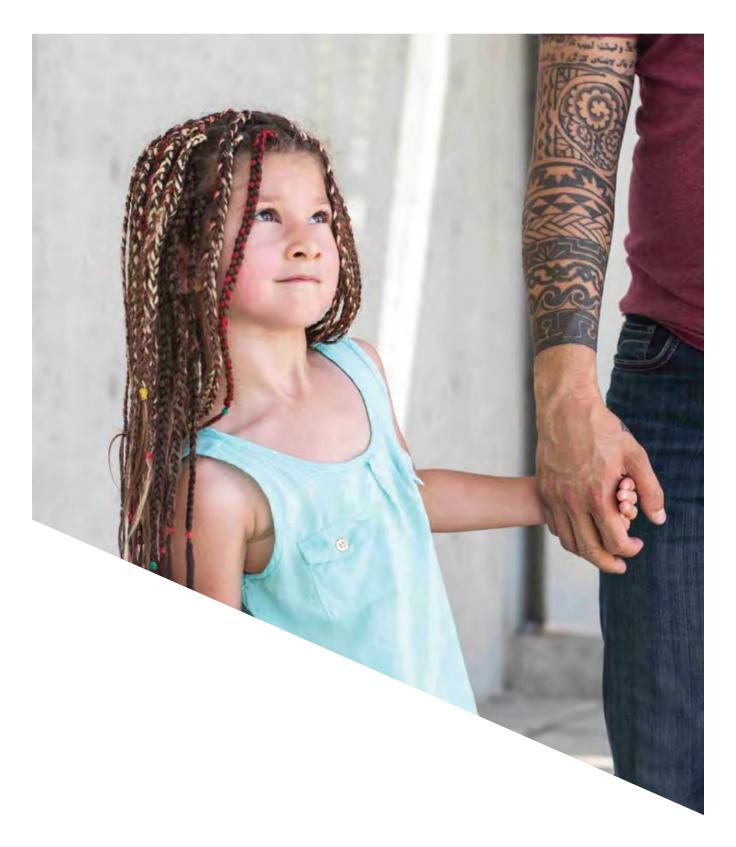
 Engaging staff in conversations about how to apply this knowledge into practice –

Deliberately scheduling meetings to discuss brain story science created opportunities to apply this knowledge to program planning and quality improvement initiatives. Knowledge of brain development has influenced extending the age guidelines for the Advancing Futures Bursary¹⁴ to age 24 and the definition of "youth" for the Community-based Integrated Mental Health Services

- Hubs for Youth (Youth Hubs). 15 The Youth Hubs now define a youth as an individual who is 11-24 years of age.
- Brain story science provides a shared language across sectors – Within the public sector, ministries have been able to take the science and translate it in a way that makes sense in their context and the work they deliver. Using this common language, Ministry partners know the strategy, programs, and practices they are delivering are grounded in science.



- 13 https://open.alberta.ca/dataset/3d732c88-68b0-4328-9e52-5d3273527204/resource/2b82a075-f8c2-4586-a2d8-3ce8528a24e1/download/Budget-2019-Fiscal-Plan-2019-23.pdf
- 14 https://www.alberta.ca/advancing-futures-bursary.aspx
- 15 https://policywise.com/initiatives/integrated-hubs-project/



CASE STUDY

THE FAMILY CENTRE



Integrating Brain Story Science

The Family Centre (TFC) is a non-profit organization that supports some of the most vulnerable children and families in Edmonton. Their services include: in-home support to help parents impacted by trauma and toxic stress keep their children safe and healthy and reduce the number of children in foster care; community-based mental health therapy/ services to those who are isolated and hard to reach; and programs (Success Coaches) for high risk youth to keep them in school and get them across the high school graduation finish line. They also provide courses on parenting, couples communication, and anger management as well as translation and interpretation services in over 60 languages.

The organization serves approximately 20,000 clients each year and has over 240 staff. TFC works with the Edmonton Public School Board to provide wrap-around mental health services, works with Children's Services on the delivery of collaborative services to parents and families, and partners with a variety of non-profit organizations to deliver community-based programs and services.

TFC has a reputation for providing quality services based on research and evidence-based practices, and identified brain story science as a foundational component of delivering those services to achieve better outcomes. The following case study will describe the major milestones undertaken to support the integration of brain story science into the services TFC provides, identify key factors that have contributed to the success of this change, note challenges faced, and presents some of the evaluation methods the organization has used to assess the success of integrating this knowledge.

HISTORY OF INTEGRATING BRAIN STORY SCIENCE

For TFC, the journey of integrating brain story science began with the establishment of their Brain Development Committee in 2013. This committee was tasked with identifying the evidence related to, and best practices for, promoting healthy brain development in children. While the committee was doing their work, representatives from TFC were invited to a Palix Foundation reception where the work



PROGRAMS AND SERVICES

CLASSES & WORKSHOPS

Parenting courses

Couples workshops

Anger management

Self-esteem & assertiveness

Corporate workshops

COUNSELLING

Drop-in, single session Goal-oriented

Relationship

TRANSLATION SERVICES

Translations for organizations

Translations for private customers

Interpreter services

SUPPORTS TO SCHOOLS

Success coaching with youth

Mental health therapy with students, family, community, and teachers

Action for Teens program

Roots and Wings: In-home family support

CHILD, YOUTH AND FAMILY SUPPORT SERVICES

Family support services

Family engagement

Family reunification homes

Youth connector

Kinship supports

OTHER PROGRAMS/ SERVICES

Neighbourhood Empowerment Team

Employee and family assistance program

of Dr. Vincent Felitti, the co-principal investigator of the California-based Adverse Childhood Experiences (ACE) Study¹, was featured. This research resonated with TFC and their leadership team immediately; they knew it needed to be disseminated to their staff and more importantly, could be used to enhance their services. As a next step, TFC invited Dr. Felitti to personally come and present the findings of the ACE study to their staff. This presentation provided the organizational buy-in needed to begin a process to embed this evidence into the work of TFC.

At this point in time, the organization was looking for a systematic and financially viable way to build TFC's understanding of brain science and trauma, as well as how to integrate it into their work with clients. They purchased a set of case analyses (audio modules) by Dr. Bruce Perry and used

these in professional development opportunities with their practitioners. The content in the videos stimulated meaningful conversations about the research on brain science, adverse childhood events, and how apply this research in the work of the TFC. As this time, the organization had a strong internal community of practice: approximately 120 employees were meeting for three hours every month to discuss brain science and trauma. These sessions were stimulating the right conversations, however the modules themselves did not completely meet the needs of the organization. It was right around this time that the Brain Story Certification Course was being developed by the Palix Foundation. Once available, TFC used this training to continue the educational journey with their staff. Their community of practice watched the Brain Story Certification modules together, then discussed how brain story science

was changing or could change their work. Staff were encouraged to share their successes in applying brain story science to their work, which created a culture of innovation that inspired others to seek ways to further integrate this knowledge.

TFC's work in this area was highly integrated with their efforts to be certified as a trauma-informed organization. During this two-and-a-half-year journey, the organization used a systematic quality improvement approach to review a number of organizational domains (e.g., policies and procedures, environment, and identity). A committee was established for each domain. Committees were tasked with reviewing best practices and evidence, assessing the current

1 https://www.cdc.gov/violenceprevention/ childabuseandneglect/acestudy/about.html

Brain story science is really a part of how we have been looking at improving our traumainformed culture at The Family Centre. Being a trauma-informed culture is a strategic pillar of the organization. We will be certified as a trauma-informed organization in May 2020. This [integrating brain story science] is a piece of that larger piece of work."

- Focus group participant



organizational data available (or in some cases, collecting new data), and making recommendations to senior leadership on proposed changes to support the further integration of brain science and ensuring TFC was a trauma-informed organization. Approximately one-third of the organization served as members on these committees. Recommendations for each of the domains were presented to senior leadership and were used to develop a comprehensive change management plan which included goals, targets, timelines, and key leads. The following organizational changes provide examples of the impact of this work:

• TFC hiring and onboarding process was reviewed – In the past, this process was inconsistent and unpredictable for both TFC staff and those applying to work for the organization. Revised processes now include a consistent advertisement that highlights the uniqueness of the organization, a pre-screening process that provides the prospective employee with information on how the hiring process will unfold, a comprehensive information package about the organization, and consistent communication regarding next steps and timelines. These steps have been implemented to align with best practice evidence, applying brain story science, and considering a trauma-informed approach. Feedback from recent hires has been exceptionally positive. Additionally, the onboarding process at TFC now requires that staff take the Brain Story Certification Course. Staff are provided time to complete this training.



• Staff performance reviews -

In the past, staff underwent an annual performance review. This annual review has been replaced with quarterly performance meetings. One of the items discussed in these meetings is their understanding of the brain story and trauma-informed care and how to apply it to their practice. During the assessment, staff are asked to try scaling their understanding of these concepts and the ability to use them in practice. The organization believes this data will not only help inform personal development plans, it will also provide organizational data on knowledge and uptake.

• Including all staff in professional development days – Prior to this process, professional development days were primarily attended by practitioners in the organization. Now, all staff are invited to attend the professional development days. This has helped build the internal culture and understanding of brain story science and traumainformed practice across the entire organization. One of the results is that all staff are taking brain science story into their homes and communities, increasing the reach of this knowledge base.

CRITICAL FACTORS FOR SUCCESS

The following factors have contributed to the successful integration of brain story science into TFC.

The organization has a culture of learning and applying evidence**based research** – The organization has developed processes to ensure relevant research and evidenceinformed practices are identified, shared, and integrated into the programs and services they provide. Integrating brain story science did not require the development of this internal infrastructure, as it already existed. Also, senior leaders report the organization attracts professionals who are willing and interested in applying evidenceinformed practice in their work and

- making the changes necessary to do this. Employees are described as highly adaptable and accepting.
- All staff are required to take the Brain Story Certification Course and training on implementing the ACE questionnaire – TFC provides work time for all new staff to complete the Brain Story Certification Course. This ensures that staff have a common language for working together, working with clients, and participating in quality improvement initiatives.
- Communities of practice and ongoing discussion were integral to the change process and support discussion about the research and how to apply at work The importance of ensuring staff have an opportunity to process and discuss the research has been extremely valuable. TFC ensures that new staff who are taking the Brain Story Certification Course are embedded in a community of practice and that brain story science is discussed at

- monthly leadership meetings. The organization finds that when they are intentional about ensuring these ongoing discussions are happening, the evidence is consistently applied in practice and it keeps it relevant.
- Building capacity in our partners – In addition to training their staff, TFC is building capacity among staff in the 80 Edmonton Public Schools and Child and Family Services offices they work with. In schools, TFC staff provide education and inservices for school administration, teachers, staff, and families. Additionally, TFC supports schools in applying this evidence in the physical school environment and how teachers work with their students. TFC also works closely with Child and Family Services to support their capacity to deliver evidence-informed services. TFC has also presented the brain story to national networks of CEOs whose community-based organizations deliver services to families.

CHALLENGES

The following challenges have impacted the integration of brain story science into TFC.

- Limited capacity to develop curriculum or training on evidence-based practices While there was a willingness and interest to adapt the services provided to align with evidence, the organization did not have the means required to develop the tools and resources necessary to train their staff. The Brain Story Certification Course helped overcome this challenge.
- Personal fear of speaking to others about trauma - One of the most significant challenges the organization has experienced is helping staff understand that speaking to someone about their trauma history does not have negative consequences and does not trigger the individual. The organization has used their communities of practice, disucussions at meetings, and quarterly performance reviews to alleviate these fears and share stories of the positive outcomes realized through these conversations. The organization believes they are at a point where they are no longer "selling" this evidence to the staff. They have reached their tipping point, meaning that staff have enough positive experiences that this overshadows the personal fear or assists individuals in overcoming it.



Working with community partners whose journey to integrate brain story science has been slower and more challenging – There are a number of community partners who are in the early phases of integrating brain story science into their practice. There are times when working with these partners is difficult as the language, the way they work with shared clients, and the way each organization defines wellness are all different. This challenge is ongoing, but TFC is strategizing on how to address this gap in order to ensure success for their clients.

EVALUATION

TFC has worked with Dr. Steven Patty and integrated his approach, "Getting to What Matters"², into their evaluation efforts. This approach has changed the focus of evaluation from evaluating the services/service provider to evaluating the impact of change in the person themselves. This shift is substantial as

it validates the person and heightens their own role in their journey to wellness. It has served to provide more meaningful information on what really matters. These changes are reflected in the questions that are asked and what is measured directly from clients.

In the summer of 2019, TFC administered a survey to direct services staff who had taken part in the Brain Story Certification process. Fifty-five services providers completed the survey (29% response rate). Survey results indicate:

- Before the Brain Story Certification, 33% of service providers had a considerable or extensive level of understanding of brain development and its connection to addiction and mental health. After the certification, that increased to 86%.
- After receiving the Brain Story Certification, 78% of service providers feel either very confident or extremely confident in being able to share the information they learned with the people they serve.

After receiving the Brain Story
Certification, 50% of service
providers experienced a significant
change or extreme change in their
perspective of the people they serve.

TFC has engaged clients in evaluation efforts to gather data to support the identification of trauma-informed practice recommendations. These evaluation efforts provide some information regarding the integration of brain story science. The survey was developed by TFC's Trauma Informed Committee. TFC surveyed clients who accessed their facilities and services to understand how the organization was being perceived. Feedback from clients indicated the organization was being very well perceived. Survey results indicate:

- In 2018, 79% of respondents agreed or strongly agreed that "staff explain to me why they had to ask me about difficult experiences in my life (like violence and abuse)." This was a 10% improvement from the 2017 survey results.
- In 2018, 88% of respondents agreed or strongly agreed that "staff are as sensitive as possible when they ask me about difficult or frightening experiences that I may have experienced." This was an 11% improvement from the 2017 survey results.
- In 2018, 88% of respondents agreed or strongly agreed that they "feel safe talking with staff here about my experiences with violence or abuse." This was an 11% improvement from the 2017 survey results.



In addition to these evaluative efforts, TFC is currently working to ensure ACE histories are completed on all clients accessing services (over the age of 8). While administering the ACE questionnaire provides the organization with an understanding of the population they are serving, it also functions as an intervention. Many parents who have experienced abuse, neglect, and other traumatic experiences are often unaware of the impacts this can have on them, their lives, and the interactions they have with their children.

Administering the ACE questionnaire validates their experience and provides them with an explanation for their ongoing challenges and maladaptive behaviours. A heightened understanding of how these experiences have impacted them creates an opportunity for forgiveness, hope, and change, and an increased understanding of the role they play in their child's life. TFC administers the ACE questionnaire in an effort to break the intergenerational cycle of abuse and neglect.

WHAT HAS CHANGED AS A RESULT OF BRAIN STORY SCIENCE?

Brain story science has been integrated into the culture of the organization as well as the programs and services delivered by TFC. Brain story science is now a standing curriculum item in all educational services for clients. Including brain story science in educational materials and services helps individuals understand their personal reactions to stressful events



I think there is a direct link between this change [including the client's voice in reports] and how we view brain science and trauma and intergenerational trauma – most of our families are Indigenous and this acknowledges their story."

- Focus group participant

and the impact it has on other individuals, including children, in their life. As stated by one TFC focus group participant:

"We provide divorce courses for Alberta Justice and whether it is in the curriculum or not, we are bringing it into these courses. It is a very good motivator for parents when they learn about the negative impact of toxic stress."

Brain story science and traumainformed care has influenced the reporting that TFC submits to Child and Family Services. After reviewing all of the assessments and reports completed for Child and Family Services, TFC identified an opportunity to ensure the family reports they produce use a trauma-informed approach. As a result, the content of these reports now incorporates the client's voice and their experience. In the past, they included only the staff member's description of the client's experience. These reports honour the experience of family and provide an example of moving from

a viewpoint of, "what is wrong with you", to understanding, "what has happened to you."

In schools, TFC has seen physical environments change and staff behaviours change as a result of an increased understanding of brain science and the impact of trauma. One school built a room with dim lights and couches, a place where kids can go when they are dysregulated, and if necessary even fall asleep. Other schools have developed safe areas within the classroom so the students can have a timeout on their own without leaving the classroom. TFC staff have worked with teachers to help them understand why children have certain reactions in their classrooms and report that ACE scores and brain story science have been a very useful tool to help them understand the behavioural issues they see in their students. TFC staff report that inservicing has resulted in teachers and administrators changing the way they respond to a child who is acting up in school.

NEXT STEPS

TFC is working towards becoming a Certified Trauma-Informed Organization (CTIO) in May 2020. As described on the Attachment and Trauma Treatment Centre for Healing (ATTCH)³ website:

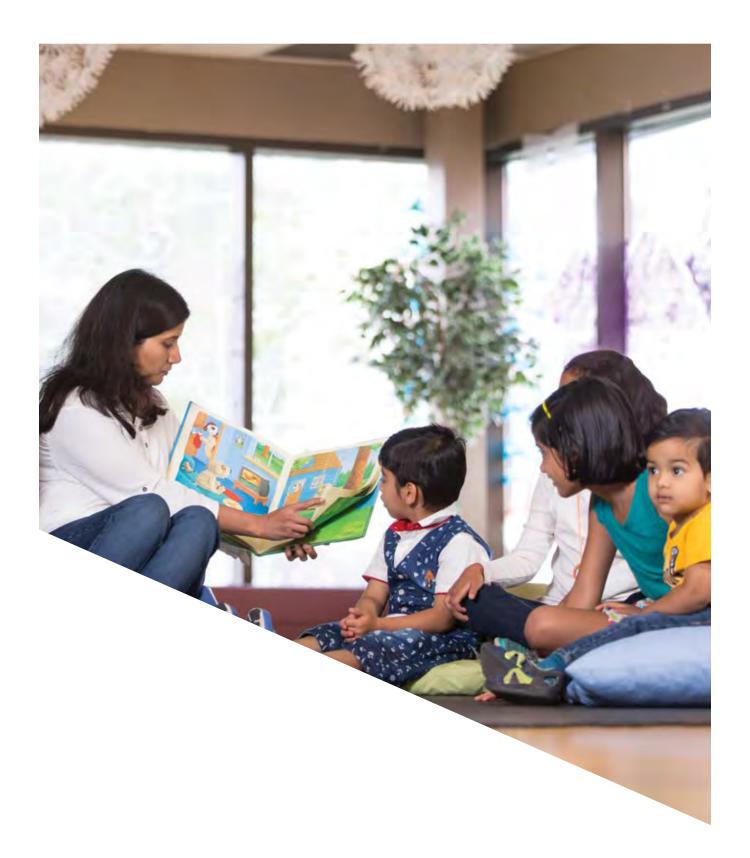
"Becoming a Certified Trauma-Informed Organization (CTIO) assures that organizations have taken steps to ensure comprehensive agency-wide training to implement a trauma and attachment integrative model. This demonstrates a commitment at an organizational level to prioritize a trauma-informed or trauma-specific service delivery. In order to become a CTIO, organizations must have completed a comprehensive agency-wide process that includes:

- Pre-evaluation / readiness assessment
- Completion of custom core training and required supplementary training options
- Introduction of trauma-informed program philosophy to community collaboratives and board members
- Consultation to implement and maintain a traumainformed approach
- Individual completion of exam to measure comprehension of trauma-informed concepts."

This will further support the integration of brain story science into the work of the organization.



³ https://www.attachment-and-traumatreatment-centre-for-healing.com/certifiedtrauma-providers.html



CASE STUDY

YVVCA CALGARY

Integrating Brain Story Science



Calgary is the largest and longest serving women's organization in Calgary. For more than 100 years the organization has focused on enhancing women's safety and well-being while advocating for equity. The organization works with donors, partners, government, and social agencies to provide shelter, transitional and supportive housing, counselling, child development, childcare, education, and employment programs aimed at supporting women to thrive.

Work at YW Calgary is approached from a woman's point of view with an understanding of oppression, inequity, and constrained choices that women experience.¹

The following case study will describe the major milestones undertaken to support the integration of brain story science into the services YW Calgary provides, identify key factors that have contributed to the success of this change, note challenges faced and present several evaluation methods the organization has used to assess the success of integrating this knowledge.

HISTORY OF INTEGRATING BRAIN STORY SCIENCE

Integration of brain story science into the programs and services at YW Calgary has happened rapidly over the last year and a half. Members of the leadership team attended a session hosted by the Palix Foundation on brain story science and quickly realized the positive impact this knowledge could have on staff, their interactions with clients, outcomes for clients, and ultimately, how it could support the implementation of the principles outlined in their Practice Framework. The YWCA Calgary Practice Framework Part I² (Practice Framework) was developed in 2016 to:

- Provide a unifying focus for all aspects of YW; from client services to advocacy and operations.
- Articulate the organization's stand on violence against women, women's poverty, and women's homelessness and how the organization will intervene and support women.
- Recognize the central role that organizational beliefs and values play in how women who are impacted by abuse, poverty, and homelessness are supported.



PROGRAMS AND SERVICES

CHILD DEVELOPMENT AND PARENTING SUPPORTS

Childcare

Child-minding

Mindful Moments

Visitation and Monitored Exchange Services

Parent Link Centre

Parent and School Support

DOMESTIC VIOLENCE AND CRISIS

24-hour Crisis Line

YW Sheriff King Home Crisis Shelter

Domestic Violence Outreach Support

LANGUAGE AND EMPLOYMENT

Language Instruction for Newcomers to Canada Women's Employment Resource Centre

SHELTER AND HOUSING

Transitional Housing
Community Housing
YW Sheriff King Home
Crisis Shelter

COUNSELLING

Group Counselling
Individual Counselling
Family Counselling

- 1 YWCA Calgary Practice Framework Part 1: https://www.ywcalgary.ca/ wp-content/uploads/2017/06/Practice-Framework-Part-I_11.29.16_final_ pages.pdf
- 2 https://www.ywcalgary.ca/wp-content/uploads/2017/06/Practice-Framework-Part-I_11.29.16_final_pages.pdf

Using brain science was a different lens that helped our staff quickly understand what they were seeing in client behaviours and thus adapt their intervention accordingly. The YW's practice framework did a really good job of outlining those core concepts. ... Even the most well-intentioned person can say they support harm reduction but still see substance misuse as an expression of moral failure or lack of self-control. To reposition and recentre those issues [substance misuse] around, that's how our brain processes things and that it is harder for her to exercise impulse control, has allowed our staff to expand their repertoire of different interventions and even their engagement style. I think that the practice framework did a very good job of opening the door, and by holding all of our staff to a standard of having to use evidence-based approaches, it certainly turned us from an intuitive stance to a far more intentional and structured approach to service delivery."



- Focus group participant

- Recognize the central role that organizational beliefs and values play in how women who are impacted by abuse, poverty, and homelessness are supported.
- Provide guidelines for principlebased, women-centred services which focus on increasing the safety of women and their children.
- Articulate a framework to guide frontline practice at YW.
- Promote evidence-based good practice among service providers at YW.
- Contribute to and influence the social narratives about women's issues.

The YW Practice Framework emphasizes evidence-based practice, trauma-informed approach, and harm reduction. Brain story science provided the organization with a knowledgebased approach to address complex social problems: it supported the staff in better understanding client behaviours and moving away from intuitive decision making to a more intentional and structured approach to service delivery.

YW Calgary used the ADKAR change management model³ to support the integration of brain story science into the organization. Initial efforts were focused on setting expectations for all client service managers to complete the Brain Story Certification Course⁴. Client service managers had the autonomy to choose when they completed the course. After that, expectations to complete the course were established for supervisors reporting to the client service managers. Once supervisors completed the training, different departments within the organization either mandated or encouraged staff to complete the training as well.

For staff in the child development portfolio, completing the Brain Story Certification Course is mandatory, practicum students doing placements at YW Calgary must complete the course in the first 30 days of their placement, and the content has been integrated into the staff orientation for community housing. As described by the Director of Program Operations: "I think it exceeded our expectations when the number of staff handing in their certificates just started to pile up". In addition to accessing the Brain Story Certification Course and using it to build capacity with their staff, YW Calgary also educated their board of directors using the Brain Architecture Game⁵.

³ https://www.prosci.com/adkar

⁴ https://www.albertafamilywellness.org/training

⁵ https://dev.thebrainarchitecturegame.com/

CRITICAL FACTORS FOR SUCCESS

The following factors have contributed to the successful integration of brain story science into YW Calgary.

- Key leaders stressing the importance of evidence-based approaches Senior leadership of YW Calgary has required that all programs and services use evidence-based approaches to ensure the supports that are provided will have an increased likelihood of producing positive outcomes for clients. This commitment to use evidence, establish clear theories of change, and define outcomes has created the conditions for the application and integration of brain story science.
- The practice framework provided a foundation to support the integration of this knowledgeinformed approach – Establishing a framework that stressed the importance of evidence-based approaches to programs and services created a state of readiness for the application of brain story science. YW Calgary has used brain story science to advance the work of their Practice Framework.
- The content of the Brain Story
 Certification Course answered the
 "What's in it for me?" question
 associated with the change
 process Brain story science
 helped staff understand client
 presentations and select more
 appropriate interventions to support
 their clients. They no longer wonder
 why clients are being disrespectful,
 breaking the rules, or pushing limits,
 as brain story science helps them
 understand there is a scientific

- explanation for these behaviours. With this understanding, staff are able to choose more appropriate interventions to support clients, as well as feel a sense of success in supporting their clients.
- Including brain story science in training programs has assisted in supervising staff Brain story science has been integrated in the training programs provided, by including the concepts and skills taught as learning objectives and defining the outcomes to be achieved. With this information clearly outlined, supervisors have a way to assess staff performance in delivering the training. The objectives and outcomes are concrete, measurable and in many cases, based on brain story science.

CHALLENGES

The following challenges have impacted the integration of brain story science into YW Calgary.

The length and academic nature of the Brain Story Certification Course - The length of the course is difficult for some of the staff at YW Calgary to complete and the academic nature of the content is difficult for some learners, especially given the diverse background of the staff working in the organization. For example, the organization employs individuals with lived experience in their shelter programs. For those staff who have had less exposure to academic presentations the content in the course was noted as difficult to engage with.

I think staff have taken it in and used it in many different ways that we can't even itemize to you. I think overall it's improved the understanding of the client situation for all of our staff across the programs.

- Focus Group Participant

Shifting practice from intuitive to evidence-based decision making – A main tenet of the YW Practice Framework is to provide evidence-based approaches when working with clients. While brain story science was noted as supporting this goal, shifting practice approaches has been difficult. Establishing the Practice Framework with the principles of how services were delivered first and then using brain story science as an underpinning approach was useful because the staff did not perceive that the organization was "doing brain science." Rather, brain story science was one evidencebased approach that supported the implementation of their Practice Framework.



WHAT HAS CHANGED AS A RESULT OF IMPLEMENTING BRAIN STORY SCIENCE?

The following section outlines examples of how services have been changed as a result of using brain story science.

Using Brain Story Science in A Domestic Violence Treatment Program

YW Calgary delivers a 16-week domestic violence treatment program. The program is primarily attended by men who have been mandated to participate as a condition of a court hearing. The course is delivered on behalf of the Ministry of Justice and Solicitor General and includes mandated content from the Ministry. In an effort to ensure the program aligned with the Practice Framework and achieved better outcomes for

We had a comment card from a man who said:

'Week one, I just hated it. But now, at week 14, I'm using my meditations to help me develop new neural pathways.'

And I have to giggle, because I can't imagine how we would have facilitated that moment for him, it was staff saturating their content with brain-brain-brain-brain-brain-brain-brain-skilll-skill-skill-skill-skill-skill-skill-skill-skill-skill-skill-ski

- Focus group participant

participants, YW Calgary reviewed and updated the program content. As a result, the first session is focused on brain story science and the core story of brain development. It provides participants an opportunity to understand how their childhood experiences have shaped their ability to manage their emotions and problem solve, assists them in understanding how to better engage with their children, and hopefully prevents future victimization. In addition to providing the background and information about brain story science, the programs have intentionally integrated skill development. The program teaches participants skills that work on cognitive, interpersonal, and behaviour regulation. Providing participants with information about brain science and pairing this with skill development has resulted in better outcomes. Evaluation results suggest this approach is resulting in improved self-regulation.

Integrating Brain Story Science into Permanent Supportive Housing Services

YW Calgary delivers a community housing program⁶ which offers permanent, supportive housing to single women who have experienced chronic homelessness and face challenges (including mental health, addictions, and physical health issues) that affect their ability to find and maintain housing. As a component of this program, women are offered individualized support to help them access income support, mental health resources, employment or education, and addictions support. Program participants also have access to support that assists them in staying in their homes and engaging with the broader community. Integrating brain science

I have used an expression that kids lack skills not will. And that sentence is just as applicable to any of the clients that we service. They lack skill, not will. They do well if they can. And if they are not doing well, it's because of a real skill deficit, the origin of which is valid and was likely very much beyond their control."

- Focus group participant

into this program has shaped how cases are formulated and what supports are made available to assist women. The program seeks to build skills and address resource deficits to support and maintain tenancy in the community. When staff bring an understanding that program participants lack skills due to valid reasons that were beyond their control, case formulation has shifted to identifying opportunities to address skill or resource deficits, and ensure they are in place to support women to be successful.





EVALUATION

In 2018, a YW Evaluation Framework⁷ grounded in two theoretical concepts, the Sustainable Livelihood Models and the belief that hopefulness is linked to well-being, was developed to:

- "Provide a unifying focus for all evaluation activities in YW Calgary client services.
- Align the concepts of the YW Practice Framework and the YW Calgary Supervision Framework with evaluation activities.
- Articulate YW's belief that program design, evaluation, and quality assurance impacts service delivery and affects optimal client care.
- Affirm a common theoretical basis for evaluation that aligns models for supervision and provides guidelines for principle-based approaches.
- Promote evidence-based good practice among client services staff at YW Calgary.
- Contribute to and influence the social narratives about organizational practice issues."⁸

The framework provides direction for the need for programs to articulate their theory of change and a program logic model. A theory of change is described as a "snapshot" of a program at one moment in time that articulates what happens between a program intervention and the hoped-for outcome. Program logic models provide the organization with a way to visually depict the elements of each program and demonstrate how a program's components work together towards anticipated outcomes. These two components assist in developing evaluation methods that can provide information on the effectiveness of programs or services.

In many programs, evaluation includes an assessment of emotional regulation using Difficulties in Emotion Regulation Scale - 18 (DERS)⁹. This tool provides a mechanism to measure skill development related to emotional regulation and is a direct result of the organization's application of brain story science in working with clients to understand how their history has impacted their brains and behaviours and to build skills to support improved regulation. This tool is used in most programs within YW Calgary and will be implemented in their housing programs in the near future.

 $^{7 \}qquad https://www.ywcalgary.ca/wp-contentuploads/2019/03/Evaluation-Framework-FINAL-1.pdf$

⁸ ibid

⁹ https://www2.psych.ubc.ca/~klonsky/publications/DERS18_measure.pdfhttps://www2.psych.ubc.ca/~klonsky/publications/DERS18_measure.pdf

NEXT STEPS

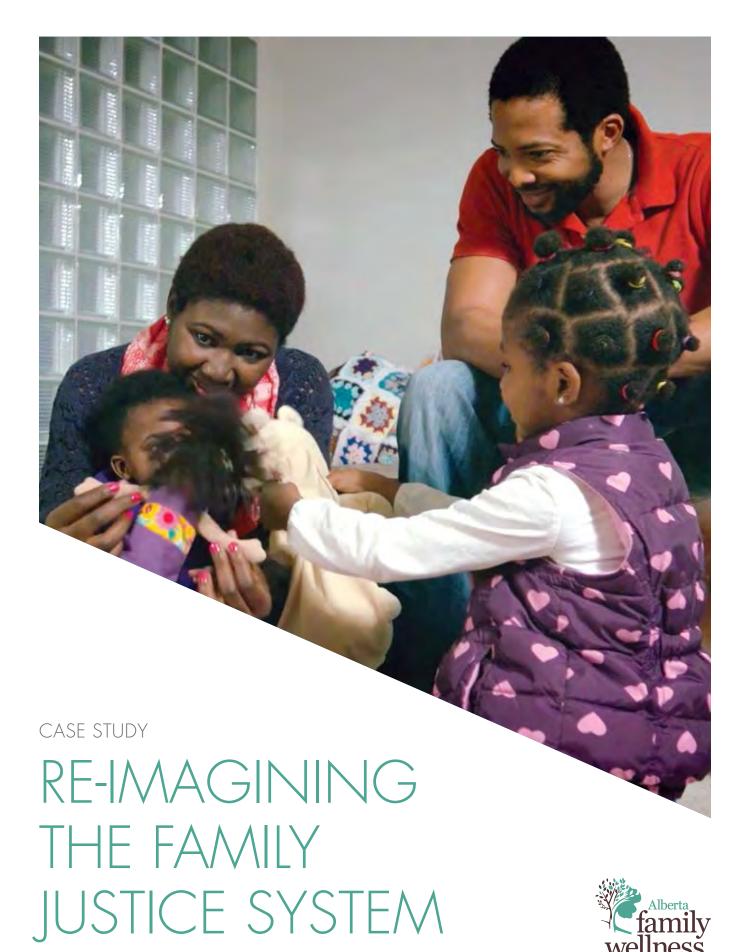
YW Calgary is working with each department to ensure they have the structures in place to deliver coordinated and intentional interventions. This includes the development of logic models, theory of change statements, and ensuring every front line worker in the department can articulate in a very succinct manner "why they're doing what they're doing." Each department will need to define/describe the

social need(s) of their program and the best practices that will be used with clients. For example, programs will be required to describe what is indicated for the treatment or their response to presenting issues and how they will know if they are making measurable impacts. It was noted that brain story science assists in selecting the interventions that will be used with clients and measuring impact. YW Calgary continues to explore how brain science can be used in various services to create deeper impact.

...I would also say that embracing something like brain science, it's actually more in tune with our sector's commitment to be non-judgmental, because science doesn't discriminate. Everybody has a brain and I think that this is one of the equalizers. No matter what your race is or what access you have to financial resources, you have one brain. And I think that there's actually a really interesting level set that takes some of the personal and ideological sting out of the work, as there's actually a scientific basis for understanding this that does not require you to exercise any kind of judgment that could be conflated with prejudice or bigotry or whatnot. So I think paradoxically, by being more scientific, that's actually more inclusive."

- Focus group participant





Integrating Brain Story Science in Alberta

n effort has been underway in Alberta since 2013 to re-imagine the family justice system in response to concerns about the ability of the family justice system to respond appropriately to the needs of families. The initiative began within the formal justice system and coincided with the release of a number of reports by the national Action Committee on Access to Justice¹, including reports from the Family Working Group and the Prevention, Triage and Referral Working Group. These reports emphasized the need for drastic system changes and this message was reinforced in the final Roadmap Report² of the Action Committee, which called for a significant culture shift within the family justice system. The Roadmap Report identified the need to promote a new way of thinking to guide the approach to reform.

We need a fresh approach and a new way of thinking. In short, we need a significant shift in culture to achieve meaningful improvement to access to justice in Canada – a new culture of reform."

Meetings were held across the country to encourage action on these reports, and in Alberta that meeting provided the opportunity for the creation of the Reforming the Family Justice System (RFJS) initiative.

From the outset, the Co-Convenors recognized that they were engaged in complex systems-change, and that the work required a new approach and a paradigm shift if the desired change was to be realized.³

The following case study will describe the RFJS theory of change, the methods being used to realize this change, the developmental evaluation approach, critical factors for success, challenges, and next steps for the RFJS in integrating brain story science into re-imagining the family justice system in Alberta.



REFORMING THE FAMILY JUSTICE SYSTEM

The RFJS encourages changes "in the behaviour, relationships, actions, activities, policies and practices of individuals, groups, communities, organizations" (Wilson-Grau, Ricardo & Britt, Outcome Harvesting. Ford Foundation, May 2012, revised November 2013). Changes throughout the family justice system are encouraged and supported by the RFJS, through convening, education, pilot projects, and policy changes that align with the theory of change and the Outcomes Framework adopted by the Co-Convenors.

"Society is calling for change to our system of family justice: big change. The RFJS initiative is a large, collaborative, society-wide response to that call."

> Update from Co-Convenors and Backbone Team, December 2018

- 1 ("Action Committee"). The Reports of the Action Committee are available online at: https://cfcj-fcjc.org/action-committee/publications/
- 2 Access to Civil and Family Justice: A Roadmap for Change. Report of the Action Committee on Access to Justice in Civil and Family Matters. October 2013 at p.6. Available online at: https://cfcj-fcjc.org/action-committee/publications/
- 3 Justice Andrea Moen of the Court of Queen's Bench of Alberta (now retired), observed the toxic stress that was occurring in high conflict families that were appearing before her, and took a study leave to learn about brain science. When she returned from that leave, she went on to lead the efforts of the RFJS, and was the Court's first Co-Convenor of the initiative.

INCORPORATING BRAIN SCIENCE INTO FAMILY JUSTICE REFORM: THE CULTURE SHIFT

The RFJS approach to family justice is unique in Canada. Unlike reform efforts that are primarily focused on increasing access to the family justice system, the focus of the RFJS has not been on the typical "access to justice" efforts4. Rather it has been animated by the Action Committee call for a culture shift, and informed by brain story science as the evidentiary foundation for change. The brain science includes the growing awareness that childhood adversity affects the developing brain in key ways that can set children up to struggle with learning, social, and health outcomes, sometimes even decades into the future. The landmark Adverse Childhood Experiences (ACE) Study⁵, a partnership between the U.S. Centers for Disease Control and Prevention and Kaiser Permanente, was the first study to document and identify 10 types of childhood adversity that are associated with increased risk of developing chronic health conditions such as cardiovascular and metabolic diseases, and addiction and mental health problems, in middle age. These ACEs fall into three categories: maltreatment, neglect, and household dysfunction, including parental separation and/or divorce. Many of these ACEs occur in cases that are heard in family court, which underlines the need for the justice system to be familiar with this science.

Through learning about brain science, RFJS Co-Convenors and Collaborators have come to understand that the toxic stress arising from unresolved family disputes has negative consequences for parents and their children. Brain science confirms not only the impact of ACEs on future health and social outcomes, but also the ability to build resilience and buffer the effects of toxic stress through supports for families and children who have experienced ACEs. The RFJS theory of change adopted by the Co-Convenors and Collaborators, is grounded in this science.

Through learning about brain science, RFJS Co-Convenors and Collaborators have come to understand that the toxic stress arising from unresolved family disputes has negative consequences for parents and their children."

The RFJS theory of change was created using a powerful process called "causal layered analysis" which invites participants to work through four layers of understanding about the current system: (1) the problems, (2) patterns, (3) systems, and, (4) beliefs which hold us there.

Through a facilitated exploration of these layers of understanding, Collaborators were able to articulate the current mental model of the family justice system, and then to agree on the new mental model they were seeking to achieve.

There are two key aspects to the RFJS theory of change.

The first is the understanding that, "family justice issues are primarily social, relationship, parenting, and financial, that contain a legal element." Up until now, family justice issues have been framed as legal, adversarial processes.

As already noted, the focus of justice reform initiatives is typically understood as improving access to justice, which means improving legal processes and increasing access to those processes. What our theory of change has helped the RFJS Collaborators understand is that we actually need to reduce access to legal adversarial processes for many of the challenges families are dealing with. We now say that we need to untangle the social, relationship, parenting, and financial issues from the legal, and to provide families with the supports they need to address their social, relationship, financial, and parenting issues. While there may still be legal issues to resolve, the RFJS encourages parties to first address

- Access to justice initiatives tend to focus on ways to improve access to courts, lawyers, and legal processes, through efforts to simplify formal processes; to increase funding for legal aid; recent innovations such as pro bono legal assistance, unbundled legal services and an expanded role for paralegals; the creation of self-help centres which provide the public with access to legal information; and by encouraging mediation and alternative forms of dispute resolution. For example, see the 33 recommendations for change in the Meaningful Change for Family Justice: Beyond Wise Words report of the Family Justice Working Group of the Action Committee. April 2013. Available online at: https://cfcjfcjc.org/action-committee/publications/ See also the review of the previous 10-15 years of family justice reports, recommendations, research studies and papers compiled by the Family Justice Working Group of the Action Committee: Erin Shaw, Family Justice Reform: A Review of Reports and Initiatives, (Family Justice Working Group of the Action Committee on Access to Justice in Civil and Family Matters, April 2012).
- 5 Centers for Disease Control and Prevention. Adverse Childhood Experiences (ACEs). http:// www.cdc.gov/violenceprevention/acestudy/ index.html.
- 6 Jehn, Michelle, Jessica Spina, Diana Lowe and Barb Turner (2015) "Reforming the Family Justice System: Using a Causal Layered Analysis to Develop a Theory of Change", in Proceedings of Relating Systems Thinking and Design (RSD4) 2016 Symposium. Banff, Canada, September 1-3, 2015. Available online: https://app.box.com/s/ hd2bed6n71u4bj42x6ituunmt7sf1vnn
- 7 RFJS Theory of Change.



their social, relationship, parenting, and financial issues, and then if possible, reach agreement on outstanding matters through mediation and collaborative family practice. Only those legal matters that cannot otherwise be resolved should be brought to the court for a legal decision. The role of lawyers in this model is to help ensure that the agreements that the parties have reached reflect this approach, empowering them to move forward in a positive way that values the supports they have put in place, and to the extent possible, to resolve their disputes through non-adversarial approaches.

While there may still be legal issues to resolve, the RFJS encourages parties to first address their social, relationship, parenting, and financial issues, and then if possible, reach agreement on outstanding matters through mediation and collaborative family practice."

The second is the key impact that the RFJS seeks, which is that, "families (parents and children) thrive, even while undergoing changes to family structure"⁸.

Over time we have realized that this actually articulates the culture shift at the heart of the RFJS – a shift away from a focus on legal, adversarial processes, to a focus on family wellbeing. Our goal is simply that "families thrive". The work that we are engaged in is to re-imagine the family justice system to better address the needs of families.

HOW ARE WE

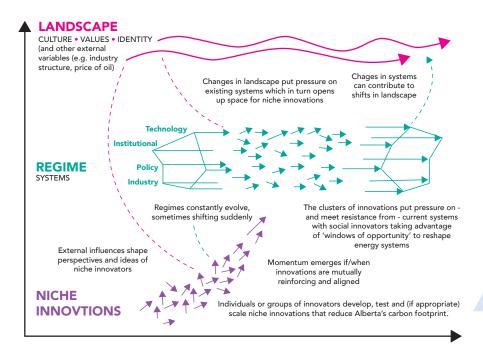
The RFJS is convened by the Court of Queen's Bench of Alberta, the Ministry of Justice and Solicitor General, and the Law Society of Alberta. The Co-Convenors adopted a broad understanding of family justice, and seeks out diverse viewpoints, including indigenous, faith-based, immigrant, gender, mental health, addiction, and poverty perspectives. It is a large-

scale collaboration, with more than 400 Collaborators that include typical justice system participants such as:

- judges
- lawyers
- government representatives
- legal aid
- public legal education organisations

These have been joined by Collaborators who might not traditionally be considered to be part of the justice community, including:

- psychologists
- social workers
- health care providers
- educators
- financial advisors
- participants from a number of government ministries including Children's Services, Community and Social Services, Health, and Education
- other family supports, such as the Family and Community Support Services (FCSS) offices that exist throughout the province



The RFJS is a collaborative action⁹ initiative, designed to address change at the systems level.

The RFJS Developmental Evaluation Coach, Mark Cabaj, shared the Geels Framework¹⁰ with the RFJS Collaborators, as a way of understanding the complex process of systems change. This has helped Collaborators to visualize how the work that is underway fits into the larger systems change that is desired, by illustrating that change is occurring at three levels: landscape, regime, and niche innovations.

The upper "landscape" level involves culture, values, and identity, and has helped Collaborators to recognize the culture shift that is underway. All efforts within the RFJS should be aligned with this culture shift, which means that they should be designed to achieve wellness for families.

The second level of the Framework is the systems level, encompassing institutions, law, policy, practices, technology, and industry. While systems are constantly evolving,

in a systems-change process the goal is to accelerate the change in alignment with the new mental model. Both the Queen's Bench adoption of the RFJS theory of change, and the Ministry pilot of the Family Justice Navigators, are systems-level change.

The innovative pilot undertaken by the Ministry of Justice through their Family Justice Navigator program, which was housed in the County of Strathcona within the Family and Community Services (FCS; also known as FCSS in other jurisdictions), is an example of a significant systems shift which brought together a Ministry of Justice program with a municipal program, with the goal of improving outcomes for families. The legislative mandate of FCSS organizations is support for individuals, families, and communities through preventative social programs and services, so these organizations are already aligned with the RFJS. What the pilot has done is to shine a light on the incredible FCSS resource that already exists in 180 communities in the province. By empowering these FCSS organizations to support families as they are dealing with the social, relationship, parenting, and financial issues that arise on restructuring, in child welfare matters and domestic violence, this promises to expand the reach of family supports to scale across the province. Efforts are also underway to share the experience of the County of Strathcona FCS with other FCSS organizations in Alberta.

One Queen's Bench judge has begun to use a new approach when family matters are brought before him in family chambers.

I have been a lawyer and a judge for many years, and have been aware of many of the tools and approaches that have been identified as better approaches to family matters. Indeed, I've applied some of them in my courtroom. However, I clearly remember the first time I decided to apply the overarching strategy of the Reforming the Family Justice System (RFJS) initiative on a family file that had been in the family justice system for years.

It was my first time hearing an application by these parties. It was a special chambers hearing with several red flags. That might be what made me feel that this was a case that cried out for a different approach. The file was 14 inches thick. They had a dozen previous orders, all with respect to parenting. They had reached a 'final resolution' six months prior and were

- 9 The Collaborators adopted a definition of "collaborative action" from the Canadian Forum on Civil Justice: "Working together in a cooperative, equitable and dynamic relationship, in which knowledge and resources are shared in order to attain goals and take action that is educational, meaningful and beneficial to all."
- 10 This visual was created and shared with the RFJS by Developmental Evaluation Coach Mark Cabaj, Here to There, based on the Multi-level framework on sustainability transitions by Frank W. Geels.

now applying to vary it. Both of them had well-paying jobs, but neither of the parties had a lawyer because they had exhausted their financial resources.

In such a scenario, there are legal principles that I could have employed, including simply declining their application and enforcing the previous order.

Instead, I decided to do something different. I decided to apply the principles from the RFJS and try to achieve a better outcome for this family.

I noted to them in Court that they had already had too many judges, too many orders, and too much conflict, and this was causing problems for their family. Heads nodded in the gallery. I ordered that, from this point onward, we were doing things differently. Instead of having a different judge for every application, they were to work only with me. I was seized with their file, so any problems would come to me. More heads nodded. Then, rather than making a decision, I directed them to important resources. I told them to watch the Brain Story and Resiliency videos on the Alberta Family Wellness Initiative website. I explained Adverse Childhood Experiences to them and the harm their conflict was causing to their kids. As well, I gave them other practical tools to help them work through their conflicts. They followed this original direction, and we had three or four conferences over a number of months. I tried to be innovative and creative with them, coaching and encouraging them to address their issues together. I was not making decisions, but rather empowering them to do so.

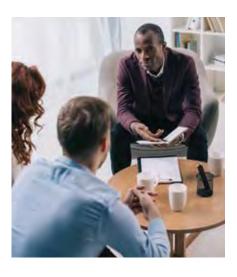
On the day of their last court application, almost everything had been resolved. They had come to their own decisions. I only made one tiny decision. They had figured everything else out themselves. They didn't need me, or any judge, any more. All they had needed were the tools to do things differently. They needed somebody to stand up and say: "We're going to do this a different way."

There was a lot of emotion in the courtroom that day. They said, "I don't know why we didn't do this years ago. This feels so much better."

While this was a great outcome for this family, it was also a learning experience for me that I wanted to share more broadly. It underlined that if we do things differently, way differently, people will embrace it. People will embrace it because it's the right thing to do. They know in their hearts that it's the right thing to do. The surprise is not that it might fail. The surprise was that it works so well.

This story is helping to inspire Collaborators and the families they serve, to change their approach to family matters.

The third level of change is called "Niche Innovations", which are a type of experimentation with new ideas that are explored and tested before they are implemented in practice. There have been many promising innovations considered, including the original idea for the Family Justice Navigator pilot of the Ministry of Justice and Solicitor General and the County of Strathcona FCS. The RFJS initiative encourages the exploration of these kinds of ideas, with the hope that they will lead to changes



in behaviour, relationships, actions, activities, policies, and practices, in alignment with the theory of change.

DEVELOPMENTAL EVALUATION

The RFJS has adopted developmental evaluation, which is a method of evaluation that helps to ensure that the work being undertaken is achieving the desired changes in behaviour, policy, and practice, and that all actions lead to learning. By its very nature, systems change is iterative and does not follow a pre-determined plan. Developmental evaluation supports the process of systems change while ensuring that the work is rigorous and based on evidence. The evaluation happens as part of the innovative process, supports learning, and guides the process. It encourages Collaborators to pursue actions that are succeeding in bringing about change that is in alignment with the theory of change, to shift their efforts when their actions are not achieving the desired change, and to learn throughout this process.

Developmental evaluation has been invaluable to the RFJS, helping to identify challenges experienced in the initial Working Groups and to allow a shift in the way that the justice system responds to family matters. 11 After exploring several ways of advancing the work, the Co-Convenors re-focused the efforts of the RFJS initiative on a process they called "Ambassadors for Change", which works to achieve the desired outcomes by increasing awareness and understanding of the theory of change across broad social networks, and encouraging alignment through changes in behaviour, policy, and practices. Since 2017, hundreds of meetings and presentations have taken place with a wide variety of individuals and organizations across many different sectors. A large proportion of these have arisen through requests to the RFJS from groups seeking to learn more about the initiative, which is a sign that the knowledge is spreading and beginning to take hold. Changes in behaviours, policy, and practices are also beginning to occur as a result of these conversations.

Developmental evaluation is used to assess the alignment of initiatives with the theory of change. We are experiencing significant changes occurring at the systems level, and an interim evaluation is underway by the Ministry of Justice to help to determine whether the Ministry is able to support the expansion of the Family Justice Navigator role to other sites.

The RFJS is currently undertaking an "Outcomes Harvest" to help identify and report on changes in behaviour, policy, and practices that are taking place. We have begun to interview key Collaborators in order to be able to "tell the RFJS story" 12. Steps are also being taken to develop measures that will gauge whether family well-being is improving as a result of the changes promoted by the RFJS theory of change.

CRITICAL FACTORS FOR SUCCESS

Two key factors have contributed to the successful integration of brain story science into the RFJS initiative.

Leadership

The convening of the RFJS by leaders of three of the key institutions of the family justice system has been a significant factor in the success of the initiative to date. In the early days, this convening generated interest and excitement, which helped to ensure that individuals and organizations that were invited to participate were likely to do so. From the outset, the Co-Convenors explained that their role is not to drive change or direct the initiative but rather to bring the Collaborators together to explore questions that empower a deep re-imagining of the family justice system. As the initiative progressed, the Co-Convenors not only supported and participated in the discussions, but also began to adopt the changes within their respective organizations. 13 These efforts have both signalled the adoption of the theory of change at the highest level in the family justice system, and have modelled the approach that the RFJS is encouraging all Collaborators to adopt. The leadership of the Co-Convenors has created a "licence to innovate", which inspires confidence and the social licence to undertake real change.¹⁴

Collaboration

The decision to engage a broad collaboration has ensured that the RFJS is focused on the kind of transformational change that was called for in the Roadmap for Change report. ¹⁵ As was reported in a Harvard Business School study, The Network Secrets of Great Change Agents, "people who bridged disconnected groups and individuals were more effective at implementing dramatic reforms, while those with cohesive networks were better at instituting minor changes." ¹⁶

- 11 The RFJS has received funding from Innoweave to hire Mark Cabaj as a Developmental Evaluation Coach. Mark has been engaged in the RFJS since 2015, and his evaluations have been instrumental in guiding the work we have engaged in.
- 12 This was made possible by the generous funding of the Palix Foundation, for a research assistant who was made available to work on the RFJS initiative in 2019. The story above, told by the Queen's Bench judge, is one of these.
- 13 The Court of Queen's Bench adopted the RFJS Theory of Change as part of its Strategic Plan, and has continued to work internally to facilitate opportunities for change in alignment with the Theory of Change. The Ministry of Justice and Solicitor General undertook the Family Justice Navigator Pilot in the County of Strathcona, which signaled a willingness to experiment with the type of change that was being promoted.
- 14 The authors of Social Innovation Generation reflect on the value that a "licence to innovate" can create within a system, fueling a culture of permission and empowerment to work on alternative systems that better address contemporary challenges. Cahill G. and Spitz K., 2017, The J.W. McConnell Family Foundation. While they were observing the role of the Social Innovation Generation in creating an ecosystem for change, the Co-Convenors of the RFJS have played that 'licence to innovate' role within the family justice system.
- 15 Supra, note 2.
- 16 Casciaro, Julie Battilana and Tiziana Casciaro. "The Network Secrets of Great Change Agents" Harvard Business Review, HBR, July 2013, hbr.org/2013/07/the-network-secrets-of-great-change-agents

CHALLENGES

The following challenges were identified as factors that have had an impact on the progress and capacity of the RFJS to bring about the desired change in the family justice system.

Systems change takes time

Like many systems-change initiatives, the RFJS has been challenged by impatience among Collaborators and funders who wanted and expected to produce a tangible, concrete change. The changes that are now becoming more visible in behaviours, policies, and practices, are helping Collaborators to see that the RFJS efforts are achieving significant change. These are the changes that have already been occurring at the level of culture, system, and niche innovation, as well as new actions underway to expand the knowledge of brain science among family lawyers, and to integrate the theory of change across government ministries. But this has taken time. and the initiative has been criticized by some who did not understand the process of change that was underway.

Funding

Another common challenge to systems change is funding. The funding that has been available for the RFJS has been primarily in the form of in-kind support through staff secondments. Over time, and through changes in leadership of the initiative and in government, these secondments have not been continued. The initiative has been able to adapt and continues to expand its reach and influence in the family justice system in Alberta. Of course, much more could be achieved if there were staff in place

to provide the support needed for this work, and resources for communication both among the Collaborators and with the public. Efforts are underway to obtain the kind of funding support that will expand the impact of the RFJS in achieving the goal of wellness for families.

NEXT STEPS

With the assistance of our Developmental Evaluation Coach, the Co-Convenors developed an Outcomes Framework which identifies key priorities contemplated for the coming years:

Legal Profession

Working with the legal profession to encourage brain science education of family lawyers, and to identify implications for shifts in ethical responsibilities and practices of family lawyers.

Courts

Working with the Provincial Court and the Court of Appeal to ensure that they are familiar with and have considered the theory of change. Continued work with the Court of Queen's Bench on their efforts to bring about internal changes that align with the theory of change.

Justice

Continued work with Justice & Solicitor General on family justice initiatives.

Public

Helping to enhance the public understanding that "parents fighting about their children causes harm", and to ensure supports are in place to improve resilience and well-being.

Wellness

Working with frontline service providers/ supports for families to empower them to provide the social, relationship, parenting and financial supports families need when they are restructuring.

Cross-Ministry

Working with other Ministries (Children's Services, Community and Social Services, Health, Education, Indigenous Relations, Parks & Environment, Mental Health & Addictions, Advanced Education) to share the theory of change and seek their commitment to providing the supports that families need when they are restructuring. In our meetings there are increasing calls for the integration of services for children, family, and youth across Ministries, in order to help families thrive.



The Outcomes Framework is designed to help communicate more clearly with Collaborators, to ensure that the RFJS is more deliberate about priorities, and to accelerate desired changes. There are many opportunities arising out of the Outcomes Framework, including alignment of the Canadian Bar Association and the Law Society in the priorities identified for the legal profession. There is also significant interest in the cross-ministry efforts that have been identified, and the RFJS is working with the Palix Foundation, the Law Society, the Canadian Bar Association, and the Court of Queen's Bench, to encourage the integration of family wellness across nine provincial government ministries. This effort seeks to ensure that these ministries have the mandate to work together and to work with the broad RFJS collaboration to achieve the goal of family wellness.

The work of the RFJS began with a focus on families going through separation and divorce, although was always intended to expand to include child welfare and family violence matters. Work on that expanded focus began in the fall of 2018, and has been empowered by working alongside Collaborators who are engaged in this work and whose efforts are aligned with the RFJS. In the area of family violence, the RFJS is collaborating with organizations and networks seeking to eradicate family and sexual violence through a province-wide collective impact initiative supported by Sagesse.

The RFJS will continue to work with all of the Collaborators that are supporting the theory of change, including professionals, front-line service providers, for-profit organizations, and not-for-profit organizations."

The RFJS has also begun to work with organizations such as Native Counselling Services of Alberta and with Indigenous leaders who are sharing their knowledge about the healing that is required to achieve improved outcomes for Indigenous families and communities dealing with child welfare and family violence. There is real hope that these efforts will both lead to the changes that are needed to improve outcomes for these families, and will be responsive to many of the Truth and Reconciliation Commission Calls for Action.



The RFJS will continue to work with all of the Collaborators that are supporting the theory of change, including professionals, front-line service providers, for-profit organizations, and not-for-profit organizations. The reach of the RFJS continues to expand through the Ambassadors for Change process, and changes are now taking place in alignment with the RFJS in many different ways.

One opportunity that was unexpected, but which confirms that Alberta is leading the way with the RFJS initiative, is a growing interest in this work from other jurisdictions. The RFJS has now been joined in incorporating ACEs into the efforts to reform the family justice system in British Columbia, and has recently received similar inquiries from the Yukon. The potential to expand the scope and impact of the RFJS nationally is something that is being explored with funders and potential Collaborators, and holds much promise for family outcomes not only in Alberta, but across the country.