Report 3 of 3

BRAIN STORY: CREATING SYSTEMS INTEGRATION USING THE RESILIENCE SCALE

STRATEGY TEMPLATE AND LETHBRIDGE CASE STUDY

October 2023



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EXECUTIVE SUMMARY

Working Towards Systems Integration

In 2023, the Palix Foundation and Alberta Family Wellness Initiative (AFWI) set in motion the Resilience Scale Framework, a three-part approach to applying the Resilience Scale at the level of individuals, organizations, and systems. The Resilience Scale Framework is communicated in a series of three reports prepared by the AFWI. This is Report 3 of 3: Brain Story: Creating Systems Integration Using the Resilience Scale.

The AFWI developed a strategy template to integrate the Brain Story and Resilience Scale at the systems level, with the overarching goal of improving collaboration, referrals, and service provision within complex systems. The strategy consists of two primary components aimed at (1) increasing competency in Brain Story science among community stakeholders and (2) creating communities of practice to actively engage community members from across sectors. The strategy was initially developed to execute a Memorandum of Understanding (MOU) between the Palix Foundation, City of Lethbridge, Alberta, Canada, and the University of Lethbridge.

The Lethbridge MOU was signed June 21st, 2022, and outlines the intention to integrate the Brain Story into municipal decision making in Lethbridge with the overall goal of improving outcomes for individuals, families, and communities. The MOU provides a framework from which the partner organizations will build a strategy for implementation. The case study serves as a summary of the first step in implementing the strategy and presents potential next steps in the development and execution of the strategy. The Palix Foundation has since identified several other communities that have the desire to implement the strategy. To facilitate and standardize this process, this report serves as a guide for community leaders, including a detailed case study of the progress in Lethbridge, Alberta, Canada. This report also provides evidence of systems-level change resulting from the utilization and integration of the Brain Story.

LETHBRIDGE CASE STUDY

On March 1st, 2023, the Palix Foundation hosted Lethbridge Resilience Day, an in-person convening for Lethbridge community stakeholders. Lethbridge Resilience Day was joined by 77 participants, the majority from the Lethbridge community, and explored how the Brain Story, especially the Resilience Scale, could be used as a tool in practice at the individual, organizational, and systems level. In addition, participants were asked to consider how their organization would like to take part in the Lethbridge strategy and help advance the goal of the

MOU. Therefore, the goal of the event was to create a movement towards systems refinement and integration by ensuring that service providers from health, education, children's services, and justice share a common language and knowledge base and are equipped to apply this knowledge in their everyday practice. A full breakdown of the events of the day, feedback, and outcomes are explored in the case study presented in this report.

BACKGROUND

The Palix Foundation is a private foundation based in Calgary, Alberta, Canada that works to mobilize the science of childhood development, mental health, and addiction from the related disciplines of developmental neuroscience, behavioral neuroscience, genetics, and epigenetics. In 2007, the Foundation founded the Alberta Family Wellness Initiative (AFWI) to turn 'what we know' about addiction and mental health into 'what we do' in practice and service delivery.

The Brain Story

At the heart of the work of the AFWI is the **Brain Story**, a collection of metaphors that were crafted by National Scientific Council on the Developing Child, the Harvard Center on the Developing Child,¹ and the FrameWorks Institute² to close the gap between what the public understands about brain development, mental health, and addiction and what science has informed us about these topics. The AFWI shares the Brain Story via the **Brain Story Certification Course**,³ a free, self-paced online resource that blends the metaphors with scientific lectures and readings.

The metaphors of the Brain Story are as follows.



Brain Architecture⁴: Brains are not simply born, they are built over time. Just like a house, a brain requires a sturdy foundation to support all future development. This highlights the importance of early childhood experiences and the seriousness of adverse childhood experiences (ACEs), which compromise the brain's foundation.

Serve and Return⁵: The most important mechanism of building a sturdy brain foundation is attentive, responsive, serve and return interactions between a child and caregiver. Just like in a game of tennis, a child serves by making eye contact, smiling, laughing, or babbling, and the caregiver returns the serve by sharing in the exchange.



¹ Center on the Developing Child at Harvard University. (n.d.). *Center on the Developing Child*. Retrieved August 2023, from https://developingchild.harvard.edu/

² FrameWorks Institute. (n.d.). FrameWorks. Retrieved August 2023, from https://www.frameworksinstitute.org/

³ Alberta Family Wellness Initiative. (n.d.). *Training*. Retrieved August 2023, from https://albertafamilywellness.org/training/

⁴ Alberta Family Wellness Initiative. (n.d.). *Brain Architecture*. Retrieved August 2023,

https://albertafamilywellness.org/what-we-know/brain-architecture/

⁵ Alberta Family Wellness Initiative. (n.d.). *Serve and Return*. Retrieved August 2023, https://albertafamilywellness.org/what-we-know/serve-and-return/



Air Traffic Control⁶: Responsive serve and return interactions and a sturdy brain foundation support the development of executive function and self-regulation skills. Much like air traffic control at a busy airport, these essential skills help us plan, prioritize, and organize our daily demands to help prevent a mental collision.

ABUSE NEGLECT

Toxic Stress⁷: Negative experiences that are not buffered by safe, stable, and supportive relationships lead to toxic stress, which can undermine brain architecture and contribute to poor mental and physical health outcomes.



Reward Dial⁸: Certain experiences in life can derail the brain's inherent reward and motivation systems, leading to adverse health outcomes like addiction.

Finally, the Resilience Scale metaphor summarizes how these aspects of brain development interact to influence lifelong mental and physical health outcomes.⁹

THE RESILIENCE SCALE

Resilience is the ability to adapt and remain healthy in the face of adversity, and is strengthened or weakened over time in response to our experiences. The Resilience Scale metaphor, developed by the National Scientific Council on the Developing Child, helps to illustrate how three principles interact to determine our capacity for resilience: the accumulation of adversity and other sources of toxic stress, access to positive supports, and the functioning of learned skills and abilities. The Resilience Scale (Figure 1) aligns perfectly with the Harvard Center on the Developing Child's three principles to improve outcomes for children and families: reducing sources of adversity, adding positive supports, and strengthening core life skills. 11

⁶ Alberta Family Wellness Initiative. (n.d.). Air Traffic Control. Retrieved August 2023,

https://albertafamilywellness.org/what-we-know/air-traffic-control/

⁷ https://albertafamilywellness.org/what-we-know/stress/

⁸ Alberta Family Wellness Initiative. (n.d.). What is Addiction? Retrieved August 2023, from

https://www.albertafamilywellness.org/what-we-know/what-is-addiction/

⁹ Alberta Family Wellness Initiative. (n.d.). *Resilience Scale.* Retrieved August 2023, from

https://albertafamilywellness.org/what-we-know/resilience-scale/

¹⁰ National Scientific Council on the Developing Child. (2015). *Supportive Relationships and Active Skill-Building Strengthen the Foundations of Resilience: Working Paper 13.* http://www.developingchild.harvard.edu

¹¹ Center on the Developing Child at Harvard University (2021). Three Principles to Improve Outcomes for Children and Families, 2021 Update. http://www.developingchild.harvard.edu

Understanding the Resilience Scale

The Resilience Scale is dynamic and illustrates how these three principles interact to influence lifelong physical and mental health outcomes.

Red boxes

Negative experiences in life can cause adversities to pile up on the left side of the beam (represented as red boxes), tipping the Scale and causing the blue arrow at the Scale's center to point towards a negative outcome.

Green boxes

By adding positive supports in the form of safe, stable, and supportive environments and safe, stable, and supportive relationships to the right side of the Scale (represented as green boxes), the Scale can be tipped in the positive direction causing the blue arrow to point towards a positive outcome.

Purple Fulcrum

The starting position of the fulcrum (represented as a purple triangle) can be understood as our original capacity for resilience and is determined by genetic and epigenetic factors. However, the fulcrum can shift to the left or right over time. With training to build our skills and abilities—such as serve and return, air traffic control, and reward motivation—that fulcrum can shift to the left, giving less leverage to negative experiences. The Resilience Scale is a robust tool that helps people identify the many factors that create or reduce their capacity for change, including a tool for self-reflection to enhance self-efficacy and hope. 12

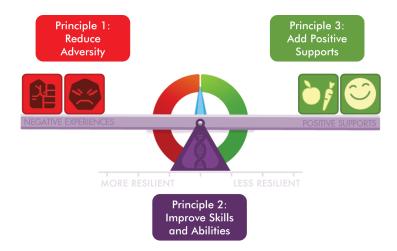


Figure 1. The Resilience Scale can be used to visualize how three principles (reducing adversity, adding positive supports, and improving skills and abilities) contribute to lifelong physical and mental health outcomes.

¹² National Scientific Council on the Developing Child. (2015). *Supportive Relationships and Active Skill-Building Strengthen the Foundations of Resilience: Working Paper 13.* http://www.developingchild.harvard.edu

Applying the Resilience Scale

Early learnings indicate that beyond its use as a metaphor, the Resilience Scale is an effective visual **tool** to facilitate communication between service providers and their clients or patients.¹³ When used as a practical tool, the Resilience Scale provides a picture of a service user's current functioning and helps the service provider match them with appropriate supports.

Once the individual's Resilience Scale is created, service providers can suggest targeted programming and interventions that will help move the Scale in a direction that supports better outcomes. Coding programming and services according to which principles of the Resilience Scale they target (reducing adversity, adding positive supports, improving skills and abilities) offers service providers a simple means of reflecting on the intent of their own programming and provides a common foundation by which to identify potential referrals within and between systems. A referral network founded in the science of the Brain Story and organized according to the Resilience Scale would result in improved outcomes for individuals and families accessing services. This sort of integration of the Resilience Scale at the individual and organization level contributes to more significant systems integration and greater systems competence.

THE RESILIENCE SCALE MASTERCLASS

In 2022, the Palix Foundation began field testing a new strategy using the Resilience Scale to work towards systems integration across health, education, children's services, and justice. This strategy resulted in the development of the Resilience Scale Masterclass, a three-hour presentation that introduces the Brain Story and explores how the Resilience Scale can be applied at the individual level ("What Do Individuals Need?"), the organizational level ("What Do Organizations Do?"), and the community level ("What Does the System Have?") Early participants in the strategy, representing diverse fields of practice, expressed excitement with this new way of thinking and were eager to take this knowledge and apply it in their everyday practice.

In addition to introducing the Brain Story, the Masterclass provides an introduction on how to use the Resilience Scale in practice to improve the lives of individuals in our community and achieve systems change. The Resilience Scale Masterclass consists of three components:

Part 1: What Do Individuals Need?

• Introduce the Resilience Scale as a tool to assess resilience and monitor change in an individual over time.

¹³ McCann, C., Cook, J, & Loiseau, E. (2021). *Early Learnings About Uses for the Resilience Scale Metaphor in Practice*. Alberta Family Wellness Initiative.

• Explore the utility of the Resilience Scale to help individuals identify their needs and the types of services they require to strengthen their resilience.

Part 2: What Do Organizations Do?

- Introduce the Frontiers of Innovation¹⁴ template as a tool for organizations to code their programs and interventions.
- Explore how the template can facilitate a referral network by fostering a common language and approach to thinking about interventions.

Part 3: What Does the System Have?

• Explore systems-level capacity by identifying organizations that primarily target red boxes (i.e., reduce adversity) and those that primarily target green boxes (i.e., add positive supports) using data from the Brain Story Certification Course.

The Resilience Scale Masterclass also includes two interactive working sessions that challenge participants to apply the science of the Brain Story at both an individual and organizational level to improve individual outcomes and achieve organizational change. Following Part 1, participants complete the Resilience Scale Toolkit, a training exercise that asks participants to draw the Resilience Scale of a hypothetical individual after reading a short scenario describing their life. The exercise requires participants to identify an individual's red boxes, green boxes, and skills and abilities related to the fulcrum, and then provide a rationale as to why each item contributes to their capacity for resilience. The Toolkit has been validated as an exercise to assess understanding of the Resilience Scale and deemed clear, useful, and applicable by service providers. Following Part 2 of the Masterclass, participants complete a working session that inquires:

- How they currently use the Brain Story and Resilience Scale in their work.
- The readiness of their organization to code their programs and services according to the Resilience Scale and Frontiers of Innovation.¹⁶
- To which other organizations within the community they refer clients or patients.

The responses to the working session are used to update an ongoing list of organizations that have a desire to be actively involved in embedding the science of the Brain Story into their daily practice. This information is also being used to create a map of the service landscape in a number of communities across Alberta (See Lethbridge Community Map).

¹⁴ Center on the Developing Child at Harvard University. (n.d.). *Frontiers of Innovation*. Retrieved August 2023, from https://developingchild.harvard.edu/innovation-application/frontiers-of-innovation/

¹⁵ Alberta Family Wellness Initiative. (2023). Report 1 of 3: *Brain Story: Using the Resilience Scale as a Tool for Individuals*.

¹⁶ Alberta Family Wellness Initiative. (2023). *Brain Story: Organizational Change Management. Quality Improvement Implemented Using the Resilience Scale: An Alberta Family Wellness Initiative Proof of Concept.*

As of August 31, 2023, the Resilience Scale Masterclass has been offered 36 times to over 1,900 participants throughout Alberta, Canada, and abroad. The Masterclass has become the central pillar of the work of the AFWI and reflects the structure of the larger three-part strategy to strengthen resilience at the individual, organizational, and systems level - the Resilience Scale Framework. At the individual level, the Resilience Scale Toolkit is a powerful resource to train service providers how to use the Resilience Scale as a practical tool to understand and visualize the resilience of their clients and how to best refer to services to strengthen resilience. At the organizational level, the Resilience Scale is an effective template for clarifying the role that organizations play in building resilience by identifying whether their programs and services are designed to reduce adversity, add positive supports, or improve skills and abilities. This system of coding programs and services based on how they contribute to resilience will enable the development of a referral network that allows service providers to make referrals according to the element or principle of the Scale that the client identifies as requiring the most urgent attention. This will improve the effectiveness of referrals and, therefore, outcomes for individuals, families, and communities. Finally, the Resilience Scale, and the Brain Story more broadly, can facilitate systems integration by providing a common language and knowledge base for service providers across sectors, which will foster improved communication and collaboration among practitioners and improve outcomes for individuals, families, and communities.

STRATEGY FOR SYSTEM INTEGRATION

The AFWI has developed a multifaceted strategy to guide the integration of the Brain Story and Resilience Scale at the systems level and is piloting this strategy in Lethbridge, Alberta, Canada (see Case Study). The intention is that this document will serve as the template for other communities and systems that endeavor to embed the science of brain development, and its implications for life-long health. The strategy consists of two main components that address critical determinants of success when implementing an innovation at the systems level: (1) ensuring a high level of competency in the innovation among stakeholders; and (2) fostering active engagement and uptake by stakeholders to ensure that integration of the Brain Story is sustainable.

BUILD COMPETENCY

To increase competency in the science of the Brain Story and Resilience Scale among stakeholders, the first phase of the strategy is to host a series of sessions throughout the community. These sessions are designed for diverse groups of knowledge users and use the Resilience Scale Masterclass as the framework for disseminating the knowledge of the Brain

Story and introducing practical tools for individuals and organizations. Sessions vary in their structure and content to suit the audience and setting.

For example:

- Lunch-and-learn sessions in the community for businesses and community organizations
- Evening and weekend sessions in the community for the public
 - Potentially designed for unique target audience parents of young children, adolescents, seniors, Indigenous peoples
- Lecture-style presentations
- Assemblies and workshops in schools for children and educators

Sessions will be provided by AFWI representatives and supported by local change agents.

Potential topics/content areas:

- Resilience Scale Masterclass (What Do Individuals Need? What Do Organizations Do? What Does the System Have?)
- Resilience Day (Resilience Scale Masterclass combined with additional interactive sessions and presentations)
- Orientation to the Brain Story
- Policy and progress updates
- The Brain Story as a lecture series
- The Brain Story for children and parents (based on interactive sessions provided for the TELUS Spark Science Center in Calgary, Alberta)

ENGAGE THE COMMUNITY

Active participation by key stakeholders is vital to ensure that the integration of the Brain Story is sustainable. Communities of Practice (CoPs) convene individuals with a common knowledge base and language to collaborate to achieve better outcomes for individuals, families, and communities. The AFWI will leverage the extensive network and the existing competency in the Brain Story among stakeholders to create several CoPs focused on improving outcomes for target populations. While the AFWI will initiate the CoPs and facilitate initial gatherings, it will be the ultimate responsibility of the stakeholders to define their goals and approaches to reaching those goals.

EVIDENCE OF SYSTEM-LEVEL IMPACT

The AFWI theory of change (**Figure 2**) is founded on the idea that investments in professional development and training will lead to both downstream changes resulting in improvements in practice and outcomes for the general public, but also upstream changes in the form of organizational change and changes in policy. The Strategy for community integration is also founded in this theory of change. The AFWI serves as a catalytic convenor bringing together critical members of the community to share learnings and outcomes; a knowledge entrepreneur by facilitating uptake of the Brain Story Certification Course and the Resilience Scale Masterclass; and a learning partner for systems by creating communities of practice and system mapping all with the goal of improving outcomes for individuals, families, and communities. Efforts to embed the Brain Story at the systems level have resulted in a number of successes in the form of policy and practice initiatives from across the sectors of health, education, children's services, and justice. The following examples highlight the readiness of practitioners and policymakers to integrate the science into policy and practice.

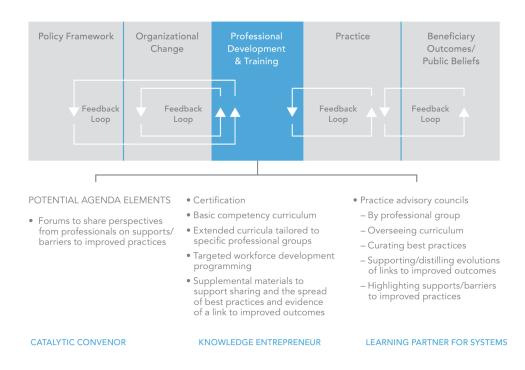


Figure 2. The AFWI's theory of change highlights the importance of professional development and training in achieving both upstream (organizational and policy change) and downstream (practice change and public outcomes) shifts.¹⁷

¹⁷ Foote, N., and Radner, J. (2019). 2017-2019 Alberta Family Wellness Initiative: Embedding the Brain Story to Catalyze Sustainable Change for Children and Families. TruePoint.

HEALTH

From 2010 to 2014 the AFWI hosted a series of symposia bringing together over 400 interdisciplinary leaders from across the continuum of care in Alberta to engage in knowledge building sessions and activities designed for participants to advance their scientific knowledge while broadening their networks. As an example, members of Alberta Health Services (AHS) represented by the Child and Adolescent Addiction, Mental Health, and Psychiatry Program (CAAMHPP), Calgary Zone brought their learnings back to their community and began integrating the Brain Story into their work. In the fall of 2020, the CAAMHPP, Calgary Zone began to embark upon Phase II of their Adverse Childhood Experiences (ACE)/Trauma-Informed Care (TIC) 2.0 Resilience Initiative. Phase II of the Initiative focuses on building resilience in children and families by targeting the three components of the Resilience Scale - reducing adversity, increasing positive supports, and improving skills and abilities. 18 Part of this initiative also involved piloting the clinical application of the Resilience Scale. Healthcare providers work through a protocol with patients and their families, and then help as the patient crafts their own Resilience Scale. They use the Resilience Scale metaphor to explain complex scientific topics like ACEs, the role of positive supports, and the importance of skills and abilities, so that the tool can be effectively used to assess the patient's functioning and track change over time. 19

The CAAMHPP, Calgary zone also collects an ACE history from every client who accesses the program to help inform treatment and prevent the further accumulation of ACEs. As of February 2023, AHS, through Connect Care, opened the field for a patient's ACE history in the electronic medical records of all Albertans. The inclusion of ACE data better informs both patients and practitioners of the impact of early life experiences on lifelong physical and mental health outcomes. As an integrated province-wide system, Connect Care enables a patient's medical history to be available to a variety of healthcare practitioners, thus sparing clients from repeating their story at multiple visits; using the Resilience Scale as a practical tool confers a similar benefit. Population-level ACE data will also be essential for health policymakers to better inform the allocation and distribution of resources.

CHILDREN'S SERVICES

Within Alberta's Ministry of Children's Services, the AFWI's theory of change (**Figure 2**) has encouraged significant policy shifts. People across the system reported a fundamental shift in their perceptions following engagement with the Brain Story – they saw parents and children not as cases but as partners and viewed them with greater compassion, empathy, and agency.

¹⁸ McCann, C., Cook, J, & Loiseau, E. (2021). Early Learnings About Uses for the Resilience Scale Metaphor in Practice. Alberta Family Wellness Initiative

¹⁹ Alberta Family Wellness Initiative. (2023). Report 2 of 3: Brain Story: Organizational Change Management. Quality Improvement Implemented Using the Resilience Scale: An Alberta Family Wellness Initiative Proof of Concept.

Shortly after introduction of the Brain Story, the policies of the Ministry of Children's Services in Alberta began to include the language of the Story, making specific reference to the Resilience Scale and how government-funded programs are responsible for reducing ACEs, adding positive supports, and to support building skills and abilities in order to tip a child's Resilience Scale towards positive outcomes. Furthermore, contract allocation among children's service providers requires that programs align with the science of stress, trauma, and brain development.²⁰

In the summer of 2022, the Government of Alberta, with support from the Government of Canada, committed \$3.6 million to support over 3,000 early childhood educators as they become Brain Story Certified and engage in theory-to-practice sessions regarding healthy brain development.²¹

EDUCATION

In July 2022, the Government of Alberta committed \$42 million over three years to strengthen mental health supports in schools.²² The funding will support the development of an integrated school-based model that facilitates referrals to community resources and designates mental health classrooms that house mental health therapists, psychiatrists, behavioral specialists, and a broader mental health team. Additionally, the funding will expand the already established Integrated School Support Program (ISSP). The AFWI works closely with key organizations that are Brain Story Certified to facilitate the application of the Brain Story and the Resilience Scale Framework thereby building capacities in the system to address the needs of children and youth. This engagement demonstrates recognition from organizations tasked with executing this provincial strategy of the importance of reducing adversity, adding positive support, and improving skills and abilities for children and youth, founded in Brain Story science.

The Secondary Education around Early Neurodevelopment (SEEN) project, spearheaded by a team from the University of Oxford's Child and Adolescent Psychiatry Group, demonstrates the value of embedding the Brain Story in the education system.²³ This program consisted of three lessons based on Brain Story concepts – brain development, the role of caregivers, and lifespan health outcomes – that were integrated into the science curriculum for 11 to 14 year olds. Over 100 teachers and 3,700 students participated in the pilot project and the feedback was overwhelmingly positive. The project demonstrated that the concepts contained in the

²⁰Children's Services. (2019). *Wellbeing and Resiliency: A Framework for Supporting Safe and Healthy Children and Families*. Government of Alberta.

²¹ Government of Alberta. (2022). Helping early childhood educators support kids.

https://www.alberta.ca/release.cfm?xID=84358E8DC9382-F007-FF4B-544B5E147CA5AE8C

²² Government of Alberta. (2022). *Improving child and youth mental health in schools*.

https://www.alberta.ca/release.cfm?xID=84341B85546DC-EF25-9722-22B077C40DF1A477

²³ Dalton. L., Rapa, E., Aukland, L., Lloyd-Newman, E. & McCall, A. (2021). *Secondary Education around Early Neurodevelopment*. University of Oxford. https://www.psych.ox.ac.uk/research/seen

Brain Story can be effectively taught to young people, who learn to appreciate the importance of early brain development and how they can interact with young children to help build sturdy brain architecture. The success of the Oxford SEEN project is encouraging and should serve as a framework for the development of future curriculum design.

JUSTICE

The Reforming Family Justice System initiative (RFJS) has been ongoing in Alberta since 2013. The goal of RFJS is to move away from an adversarial model of dealing with parental separation and child custody towards a model that is based in communication, co-parenting, and minimizing trauma. RFJS emphasizes healthy relationships between parents, opportunities to build skills related to dispute resolution within the family unit, reliance on community resources instead of the court system, and education regarding the impact of early life experiences in child development. The goal of RFJS is to restructure the justice system with a focus on the needs of the child. The RFJS is another example of how Brain Story knowledge created an overall shift in mindset within Alberta towards systems that are cognizant of the importance of building resilience through reducing adversities, adding positive supports, and improving skills and abilities.

NEXT **S**TEPS

RESILIENCE SCALE FRAMEWORK

This strategy for systems integration is part of a larger Resilience Scale Framework to integrate the Resilience Scale at an individual, organizational and systems level across sectors including health, education, children's services, and justice. At the individual level, the Resilience Toolkit provides service providers from across sectors the opportunity to practice applying the knowledge of the Brain Story and Resilience Scale.²⁴ For a full description of the application of the Resilience Scale at the individual level, please see *Report 1 of 3: Brain Story: Using the Resilience Scale as a Tool for Individuals.* At the organization level, the Resilience Scale serves as a quality improvement framework by which to code services, and programs, founded in a common competency, and serves as a tool for organizational change management.²⁵ For a full description of the application of the Resilience Scale at the organizational level, please see *Report 2 of 3: Brain Story: Organizational Change Management. Quality Improvement Implemented Using the Resilience Scale: An Alberta Family Wellness Initiative Proof of Concept.* At a systems level, the Resilience Sale can be used to create systems integration and improve outcomes for individuals, families, and communities.

²⁴ Alberta Family Wellness Initiative. (2023). *Report 1 of 3: Brain Story: Using the Resilience Scale as a Tool for Individuals.*

²⁵ Alberta Family Wellness Initiative. (2023). *Report 2 of 3: Brain Story: Organizational Change Management. Quality Improvement Implemented Using the Resilience Scale: An Alberta Family Wellness Initiative Proof of Concept.*

APPLY THE STRATEGY

Lethbridge, Alberta, Canada is the initial test site for this strategy. Lethbridge boasts the highest number of Brain Story Certification Course enrollees per capita and in 2022, signed an official memorandum of understanding (MOU) with the City of Lethbridge and the University of Lethbridge outlining the intention to integrate the Brain Story at the community level.²⁶ The attached case study provides more detail on the approach to applying the Framework in Lethbridge. The work beginning in Lethbridge will serve as a road map by which other communities can design their own implementation of the Resilience Scale Framework. The AFWI is committed to continuing to identify interested communities that are ready, willing, and able to pursue systems change by continually engaging with community change makers, internal monitoring, and outreach. Any community that is interested in improving service delivery and pursuing systems integration using the science of the Brain Story is encouraged to contact the Palix Foundation (contact@palixfoundation.org).

INCREASE BRAIN STORY CERTIFICATION

As of September 2023, over 123,000 people have enrolled in the Brain Story Certification Course from around the world, including 101,000 Canadians and over 64,000 Albertans.²⁷ Furthermore, a recent AFWI poll identified 91 organizations in Alberta that are "Brain Story Certified," meaning that Brain Story Certification is either mandated for employees or encouraged by management such that a high proportion of employees are certified. To achieve broad systems integration individual competency in the Brain Story is paramount. The success of the strategy is dependent on the broad understanding of the knowledge presented in the Brain Story and the application of the interventions and support that will improve the health and wellness of individuals, families, and communities. Therefore, the outcomes of the strategy will be supported by substantial increases in the number of certified individuals in the community.

IDENTIFY AND COLLABORATE WITH LOCAL CHANGE MAKERS

The strategy includes the creation of local CoPs that will identify specific goals for how the use of the Brain Story can improve outcomes for target populations. In 2020, the AFWI launched a CoP to explore how the Resilience Scale could be used a tool either (1) as a visual aid with clients; (2) to measure client outcomes; (3) to frame organizational theories of change; or (4) to explore opportunities for collaboration and referral.²⁸ Among the many positive outcomes

²⁶ Alberta Family Wellness Initiative. (2023). *Brain Story Certification Course: Analytics as of September 1st, 2023.*

²⁷ Alberta Family Wellness Initiative. (2023). *Brain Story Certification Course: Analytics as of September 1st, 2023.*

²⁸ McCann, C., Cook, J, & Loiseau, E. (2021). *Early Learnings About Uses for the Resilience Scale Metaphor in Practice*. Alberta Family Wellness Initiative

of the Resilience Scale CoP, participants identified that the benefits may have been amplified if the members of the CoP all shared a common goal or the desire to use the same approach in different contexts. Therefore, the CoPs that will be created for the strategy for systems integration will be separated based on target population and clinical expertise.

MAP COMMUNITY NETWORKS

The strategy for systems integration necessarily leads to increased networking between community partners, and between the AFWI and community partners. As part of the Resilience Scale Masterclass, participants are asked to indicate which organizations in their community they currently or would like to refer to (and received referrals from) to improve outcomes for the populations they serve. The AFWI uses this information to construct diagrams of the current and desired referral pathways, which provides a high level visual of the interagency collaboration happening within the community. The Lethbridge Community Map is currently available. This living visualization allows service providers to begin to understand the service landscape that exists within the community. The map helps reveal the current referral networks, underutilized resources, and potential gaps in service provision.

 29 Lethbridge Community Map. (2023, Sept 1). Kumu. Retrieved September 1st, 2023, from https://embed.kumu.io/008d0a2a080affb5bf3c4a0a5ab675ba#lethbridge-community-mapping

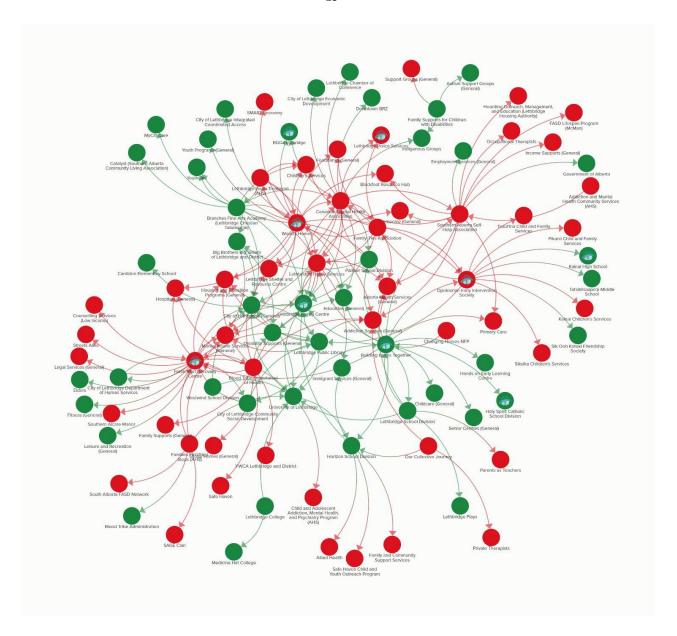


Figure 3. The Lethbridge Community Map was generated using data collected from participants at Lethbridge Resilience Day and is available at the following link: https://kumu.io/AFWI/lethbridge-community-mapping#

INTEGRATE THE BRAIN STORY INTO A REFERRAL NETWORK

In 2022, the AFWI conducted a quality improvement proof of concept project to determine if the Resilience Scale could be used to code programs and services from across the sectors of child and healthcare, education, children's and family services, and social services according to the principles of the resilience scale (i.e., reduce adversity, add positive supports, or improve skills and abilities).³⁰ The project was guided by the Harvard Center on the

³⁰ Alberta Family Wellness Initiative. (2023). Report 2 of 3: *Brain Story: Organizational Change Management. Quality Improvement Implemented Using the Resilience Scale: An Alberta Family Wellness Initiative Proof of Concept.*

Developing Child's then research and development platform (2011 to 2023), Frontiers of Innovation (FOI).³¹ See *Report 2 of 3: Organizational Change Management* for the full report on the organizations that participated in the proof of concept.

The Palix Foundation is currently exploring a partnership with 211 Alberta to embed the coding template within existing referral infrastructure.³² 211 Alberta is a helpline and database that provides information and resources to Albertans seeking community and social services, as well as serves as a communication and referral platform for service providers. Our vision is that this coding system be integrated into 211 Alberta's existing network to identify Brain Story Certified organizations and their available programming, as it aligns with the Resilience Scale, for both the benefit of service providers and the general public. Therefore, users of the network could have confidence that they are referring their clients and patients to programs that demonstrate a competency in the Brain Story and share a common language.

For a referral network based on coding using the Resilience Scale to be optimally beneficial, a large number of organizations from across sectors and the continuum of care need to have their programs and services coded. As with the original proof of concept, it is logical to begin with Brain Story Certified organizations, which already see the value in grounding policy and practice decisions in the science of the Brain Story. The strategy for systems integration presents additional avenues for recruiting organizations to participate in the coding process.

FINAL THOUGHTS

To reiterate, the goal of this report was to outline the ways the Resilience Scale can be used to drive systems integration and to summarize how the Brain Story and Resilience Scale have contributed to systems-level change. Effective systems-level change requires all elements of the Resilience Scale Framework. At the individual level, the Resilience Scale is a practical tool to apply the knowledge of the Brain Story. At the organizational level, the Resilience Scale is a template for coding programing and a tool of organizational change management. This alignment gives individuals providing and accessing services a common language and framework by which to understand and navigate the spectrum of care and contributes to improved systems integration. Furthermore, formal engagement from communities like that demonstrated in the Lethbridge MOU acknowledges the importance of a common competency across the system to improve outcomes for individuals, families, and communities.

³¹ Center on the Developing Child at Harvard University. (n.d.). *Frontiers of Innovation*. Retrieved August 2023, from https://developingchild.harvard.edu/innovation-application/frontiers-of-innovation/
³² 211 Alberta. (2023). 211 Alberta. https://ab.211.ca/

CASE STUDY

LETHBRIDGE MEMORANDUM OF UNDERSTANDING

March 2023

BACKGROUND

In the summer of 2021, officials with the City of Lethbridge approached the Palix Foundation with an interest in entering a Memorandum of Understanding (MOU) around the promotion of the Alberta Family Wellness Initiative's (AFWI) Brain Story Certification Course in the Lethbridge community. The City of Lethbridge is a strong proponent of the Brain Story, boasting a higher number of Brain Story enrollees per capita than any other community in Canada³³ and supporting a number of initiatives related to brain development, mental health, and addiction. For example, all Lethbridge Police Service sworn officers are required to complete the Brain Story Certification Course, thereby acknowledging the value in understanding the science behind brain development, mental health, and addiction when working with the general public and vulnerable populations. Furthermore, both the City and the Palix Foundation have existing relationships with the Blood Tribe of Southern Alberta. In the spring of 2021, the City signed an MOU with the Blood Tribe related to health and wellness, community planning, and economic development.³⁴ The Kainai Board of Education, notably Kainai High School, is a prime example of implementing Brain Story science into practice.³⁵ Beginning in 2016, teachers and staff at Kainai High School became Brain Story Certified and engaged in additional learning experiences concerning addiction and trauma-informed schools. This work culminated in the Reziliency Week conference in March of 2018,36 an event that provided a safe environment and creative outlet for students to share their experiences with trauma and for adults in the community to learn about the Brain Story.

The Palix Foundation requested that the University of Lethbridge (U of L) join as a collaborator on the MOU, given the extent of their existing commitment to the Brain Story, especially within the Canadian Centre for Behavioural Neuroscience. Since January 2020, the U of L has offered an undergraduate course in the faculty of Liberal Education in which students take the Brain Story Certification Course. The Brain Story is also a requirement for the Master of Education *Teaching, Learning, and Neuroscience* cohort, thanks to advocacy from faculty at the institution.

Discussion of the details of the collaboration began in the Fall of 2021. On February 10th, 2022, a virtual presentation was held (due to the ongoing COVID-19 pandemic) with 225 community stakeholders to introduce the strategy and emerging collaboration, provide a refresher for Brain Story Certified individuals, and summarize the course for newcomers. On this same day, the Palix Foundation presented to the Community Safety Standing Policy Committee

³³ Alberta Family Wellness Initiative. (2023). Brain Story Certification Course: Analytics as of September 1st, 2023.

³⁴ Reconciliation Lethbridge (2021). 2021 Reconciliation Annual Report. City of Lethbridge.

³⁵ Cain, M., Tilghman, L., Cook, J., & McCann, C. (2020). Case study of Kainai First Nation and the Brain Story. In *AFWI Developmental Evaluation:* Evaluation Report and Case Studies. https://albertafamilywellness.org/resources/reports/afwi-developmental-evaluation-report

³⁶ Alberta Family Wellness Initiative. (2019). Nitsitapii Reziliency. https://www.albertafamilywellness.org/resources/video/nitsitapii-reziliency

with the City of Lethbridge. The MOU was officially approved by the City of Lethbridge city council on June 21st, 2022, and formalized the commitment from the City of Lethbridge, the U of L, and the Palix Foundation to work with the community to achieve wide-scale integration of the Brain Story and to work towards system refinement with the ultimate goal of improving outcomes for individuals, families, and communities. In the intervening months, the Palix Foundation continued to refine the strategy and prepare for the official launch of the Lethbridge collaboration, an in-person event held on March 1st, 2023, at the University of Lethbridge – Lethbridge Resilience Day.

Session Organization

INVITATIONS

Invitations for Lethbridge Resilience Day were sent to Lethbridge and area stakeholders including: (1) staff from organizations in relevant fields/sectors (e.g., education, healthcare, community services, justice and law enforcement) that were represented in the Brain Story Certification Course enrollment data; (2) those who participated in the virtual session on February 10th, 2022; (3) organizations and individuals included in service networks within the City of Lethbridge (e.g., Integrated Coordinated Access); and (4) faculty and administrators from relevant departments at the U of L (i.e., Neuroscience, Nursing, Addictions Counseling, Public Health, Psychology, Education, Therapeutic Recreation, Indigenous Studies). Invitations were sent via Palix Foundation email and included a link to Eventbrite for registration (Appendix 1).

LOCATION

The event was held in the U of L Science Commons atrium (Figure 4).



Figure 4. Lethbridge Resilience Day was held in the Science Commons atrium at the University of Lethbridge on March 1st, 2023.

WORKSHOP STRUCTURE

Below is a detailed description of the event. The agenda is available as Appendix 2.

MORNING SESSION

Introduction of the Lethbridge Strategy

The Lethbridge Resilience Day presentations were led by Nancy Mannix, Chair and Patron of the Palix Foundation. The day began with a presentation outlining the strategy for implementing the Brain Story and Resilience Scale into the Lethbridge community over the coming year (Appendix 4). The initial iteration of the strategy focuses on delivering training and knowledge to key populations in the community (e.g., service providers, families with young children, adolescents, university students, and business owners) and facilitating communities of practice to improve outcomes for target groups (e.g., infants and toddlers, children, adolescents, families, and seniors).

The remainder of the morning was a presentation of the Resilience Scale Masterclass. This three-hour presentation served to introduce and orient audiences to the science of the Brain Story and Resilience Scale and to explore their use in practice at an individual, organizational, and systems level. The presentation consisted of three parts:

Part 1: What Do Individuals Need?

The first session of the Lethbridge Resilience Scale Masterclass consisted of an overview of the development of and key metaphors that comprise the Brain Story. This session also explored how the Resilience Scale metaphor (Figure 5) can be used as a tool in practice to assess and monitor resilience in individuals, using examples of how the COVID-19 pandemic had a universal impact on our well-being.

Working Session 1: Using the Resilience Scale with Individuals. Following Part 1, participants were asked to apply their learning by drawing the Resilience Scale of a hypothetical individual based on a short narrative description.

Objective: To learn how to use the Resilience Scale to answer the question "What Do Individuals Need?" by identifying sources of adversity, positive supports in the form of safe, stable, supportive relationships and environments, and skills and abilities related to the fulcrum. To learn how the Resilience Scale can be used to monitor change in individuals over time as they access services and have new experiences.

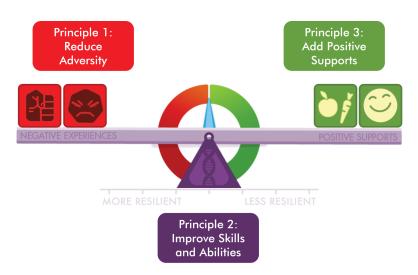


Figure 5. The Resilience Scale can be used to visualize how three principles (reducing adversity, improving skills and abilities, and adding positive supports) can contribute to lifelong physical and mental health outcomes.

Part 2: What Do Organizations Do?

Part 2: What Do Organizations Do? introduced the Frontiers of Innovation (FOI), the former research and development platform of the Harvard Center on the Developing Child, as a template by which organizations can code their services and programs. The FOI codes interventions based on the context in which they take place (e.g., clinical setting, home-based, and community-based) and their primary goal(s) (i.e., reduce sources of adversity, add positive supports, and/or improve skills and abilities). This session discussed how the FOI framework can clarify the intention of services and programs, facilitate communication and collaboration between service providers, and help service providers and the clients/patients they serve identify the services that are best suited to meet their needs. The Palix Foundation explored a proof of concept in 2022 to determine the feasibility of using the FOI framework to code programs and services on a large scale. Feedback from the 10 organizations that participated in the project was positive, and the Foundation is now looking to expand the project by coding the programs of additional organizations (see Repost 2: Organizational Change Management).

Objective: To use the FOI template to answer the question "What Do Organizations Do?" by identifying whether services aim to reduce sources of adversity, support positive relationships and environments, and/or strengthen skills and abilities.

Part 3: What Does the System Have?

Part 3: What Does the System Have? expanded the metaphor of the Resilience Scale to a system-level and explored how community organizations, schools, healthcare providers, government agencies, and others contribute to the resilience of the Lethbridge community.

Objective: To answer the question "What Does the System Have?" by identifying groups that are targeting red boxes (reduce sources of stress and adversity) and green boxes (add safe, stable, supportive relationships and environments) on the system-level Resilience Scale.

Each session concluded with an opportunity for questions and discussion.

AFTERNOON SESSION

The Brain Story in Practice - Presentations by the Community

The afternoon began with a series of presentations by local change agents who discussed how the Brain Story can improve outcomes for individuals, families, and communities within their field of work. Presenters were asked to speak to how their organization is implementing the Brain Story and Resilience Scale in practice, or how they would consider implementing the Resilience Scale in their future work.

- Dr. Bryan Kolb, Professor Emeritus, Department of Neuroscience, University of Lethbridge
- Takara Motz, Operations Manager, Community Social Development, City of Lethbridge
- Maral Kiani Tari, Executive Director, Family Centre Society of Southern Alberta
- Ramona Big Head, Vice Principal, Cardston Elementary School and former Principal,
 Kainai High School
- Bruce Holstead, Executive Director, Fresh Start Recovery Centre

Working Session 2: Community Working Session and Table Discussions. Participants were invited to engage in discussion with others at their table and begin considering organizational readiness to participate in a community of practice. They were given a worksheet with five questions to complete on their own and then discuss amongst their table. The questions are outlined below in "Working Session 2: Community Working Session and Table Discussion."

As a final exercise, participants were given red and green sticky notes and asked to write the name of their organization and the target population of their services on either a red or green sticky note according to whether they identify their organization has special skills to reduce adversity (red) or add positive supports (green). They were directed to place their sticky notes on whiteboards at the front of the room so participants could have a visual representation of the organizations present at the event (**Figure 12**).

ATTENDANCE

Lethbridge Resilience Day was joined by 77 participants; 87% of participants represented organizations with services based in Lethbridge. Others, such as school divisions, represented larger geographical areas (**Figure 6**). The most highly represented sectors were post-secondary education, children and family services, and addiction services (**Figure 7**). The complete list of participants and their organizations is included as Appendix 5. Appendix 6 contains brief descriptions of the represented organizations.

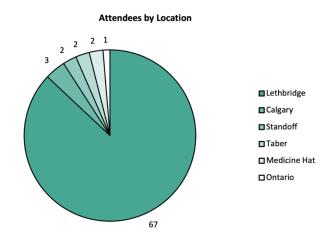


Figure 6. Distribution of the geographical location of the 77 participants at Lethbridge Resilience Day.

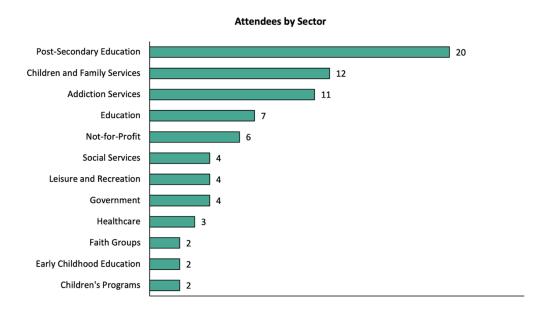


Figure 7. Distribution of the sectors of work for the 77 participants at Lethbridge Resilience Day as determined by the event coordinators.

WORKING Session 1: Using the Resilience Scale with Individuals

During a working session following Part 1: What Do Individuals Need?, participants were provided with the opportunity to apply their new knowledge and practice using the Resilience Scale as a practical tool to assess an individual's resilience. Three scenarios were used for this exercise: Angela, a single mother working from home with an ill father; Aram, a young boy who came to Canada from Syria with his supportive family; and Douglas, a man with a difficult childhood who is entering addiction treatment and reconnecting with his young child. For each scenario, participants were asked to identify the red boxes (i.e., sources of adversity), green boxes (i.e., safe, stable, and supportive relationships and environments, learning opportunities), and skills and abilities related to the position of the fulcrum (i.e., serve and return, air traffic control, and reward motivation), and provide a brief rationale for why each element was labeled as such. Participants were first asked to work individually on this exercise and then to discuss their responses with the others at their table. Workshop facilitators were present to answer questions and prompt conversation. See Figures 8 and 9 for two examples of Resilience Scales produced by participants at Lethbridge Resilience Day.

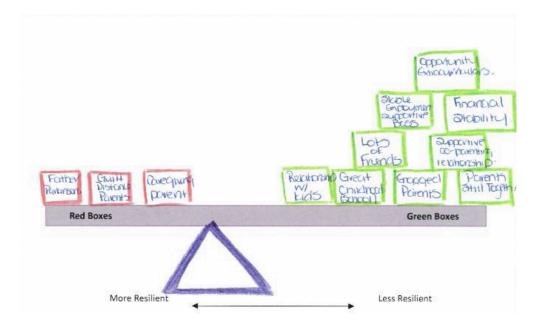


Figure 8. An example of a Resilience Scale drawn for the scenario describing the life of Angela.

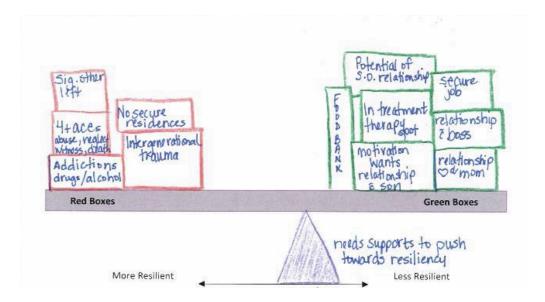


Figure 9. An example of a Resilience Scale drawn for the scenario describing the life of Douglas.

The completed worksheets were collected and analyzed. The feedback from this session provides important information about the participant's level of understanding after completing Part 1 of the Resilience Scale Masterclass and contributes to the evaluation of the usefulness of the exercise as a training tool for service providers. The Foundation used this data to validate the training exercise with the goal of creating a toolkit that will be accessible to anybody who would like to learn how to use the Resilience Scale in their practice. The Resilience Scale toolkit partnered with the Resilience Scale Masterclass has the potential to impact service provision and, therefore, outcomes for individuals, families, and communities in Alberta and globally.

The complete analysis of the data from Working Session 1 is available in *Report 1 of 3:*Brain Story: Using the Resilience Scale as a Tool with Individuals.³⁷

Working Session 2: Community Working Session and Table Discussions

Participants were asked to individually complete worksheets with the following questions and then discuss their responses with their table members.

- 1. How can/do you use the Brain Story in your work?
- 2. Are you ready to code your programming and interventions with guidance from the AFWI?
- 3. Are there organizations at your table that you see a direct referral with? If so, who?

³⁷ Alberta Family Wellness Initiative. (2023). *Report 1 of 3: Brain Story: Using the Resilience Scale as a Tool for Individuals.*

- 4. What organizations and groups would you like to collaborate with or refer students/clients/patients to in order to help improve outcomes for the population you serve? Please consider both "red box" organizations and "green box" organizations.
- 5. How can the Palix Foundation and City of Lethbridge support your organization in achieving these goals (e.g., providing resources, training sessions, facilitating introductions)?

The worksheets were collected to compile the information and plan a strategy for ongoing inter-agency collaboration and integration of the Brain Story language and knowledge into community practice.

RESULTS

How can/do you use the Brain Story in your work?

Many responses to the working session questions demonstrated insight into how the Brain Story is and can be embedded within the community. Note: Although question one specifically asked participants to share how the Brain Story is/can be used in their work, if participants mentioned related comments in their response to questions two to five, they are included here.

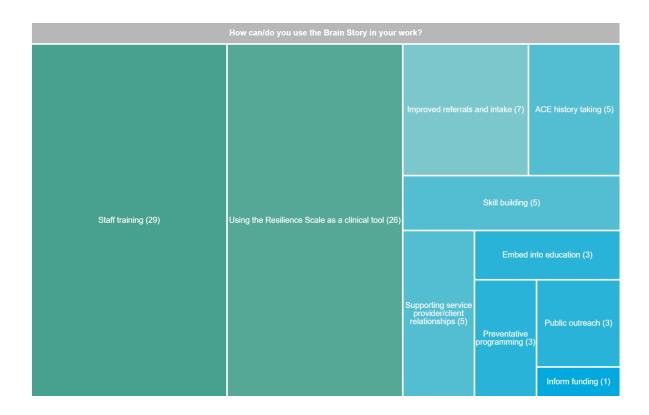


Figure 10. This figure represents a summary of the themes identified from participant answers to the question "How can/do you use the Brain Story in your work?" The number in parentheses following the theme indicates the frequency of response. The size of the box indicates the relative frequency of response. ACE stands for adverse childhood experience.

Staff training was the primary way in which participants identified that they include or could include the Brain Story in their work.

"I plan to advocate for my agency to make Brain Story Certification mandatory. I plan to work with my staff in implementing using the Resilience Scale. I want to connect with other agencies/groups using Brain Story in their work."

- Participant, Children and Family Services

"The brain story is not utilized at our organization. I would suggest to my Manager that the Brain Story Training be implemented at all levels - from CEO to custodian. This ensures an organization that is safe and Trauma Informed. Especially in working with high risk vulnerable populations."

- Participant, Healthcare

Use of the Resilience Scale as a clinical tool for a variety of purposes was also highlighted.

"As a tool, the Brain Story and Resilience Scale provide a way to ensure that all of the people accessing our service at any level feel heard and have a chance to tell their story in a way that reduces stigma. As an organization that primarily seeks to connect individuals to supports and services, that has the ability to assist in assessment whether they are in crisis, looking for support, facing homelessness, or building skills in their lives. Helps to remove the idea that someone isn't "bad" enough to deserve help."

- Participant, Not-for-Profit

"Using ACEs assessment with every client to understand their history and how many red boxes they have which allows us to work on adding more green boxes and building resiliency. Love the idea of a tactile scale and coding resources in the community."

- Participant, Not-for-Profit

"The Resilience Scale tool would be an excellent tool in assessments and helping clients to see their weakness and strengths - as visual learners. The tool is empowering."

- Participant, Healthcare

Several participants commented on the usefulness of the **common language** and knowledge base that is fostered by the Brain Story.

"Creating common systems and language for our staff and volunteers to understand and support the kids/youth and families we work with. Great clarity on where to direct people to for support they need."

- Participant, Faith Group

"As a funder of social service in the city, Community Social Development utilizes "red, green, and purple" boxes [SIC] as an example of how service agencies can deliver targeted community supports. From a system planning level, it would be very beneficial for us if more groups spoke with "same language" so we can cohesively identify system level gaps needing to be filled. This could be achieved by broader reach of the Brain Story."

- Participant, Government

Participants explained how the Brain Story helps to support relationships with clients and patients by allowing service providers to "meet them where they are" and embed discussion of the science of brain development into their frontline practice.

"When addressing maladaptive behaviors - no punishing, but teaching skills."

- Participant, Addiction Services

"Could use it to: 1) better understand our vulnerable users, where they are coming from, why they have the challenges they do."

- Participant, Leisure and Recreation

"Continue to provide training and resources around brain story to staff and parents. Discussion with parents as part of counseling intakes to refer to the Brain Story."

- Participant, Education

"The Resilience Scale helps to identify specifically where parents/students/families are in the Resilience Scale. It would help us make referrals and would facilitate conversations about student growth."

- Participant, Education

"I use the Brain Story in my work by informing my understanding of others and where they come from. It allows me to explain adversity, positive supports, and resilience in [a] digestible way to clients I work with. This allows for me to work with individuals to overcome self identified adversities and assist with the goal setting process."

- Participant, Addiction Services

ARE YOU READY TO CODE YOUR PROGRAMMING AND INTERVENTIONS WITH GUIDANCE FROM THE AFWI?

With regards to system coding, 35 of the 48 responses reported readiness or interest in moving towards coding their programs and interventions. Some comments included the need for further information and training in this area as well as authorization from leadership that can make these types of decisions.

"We would love to start the process of coding, both for where we are today [and] as we build some of the new programs we are exploring."

- Participant, Faith Group

Representation from the City of Lethbridge highlighted how the system coding would be beneficial in the allocation of funding.

"We don't deliver services directly but coordinate funding for services and their programming. A fundamental understanding of service coding is very beneficial and I feel better equipped after today's session."

- Participant, Government

Are there organizations at your table that you see a direct referral with? If so, who?

What organizations and groups would you like to collaborate with or refer students/clients/patients to in order to help improve outcomes for the population you serve? Please consider both "red box" organizations and "green box" organizations.

Forty-eight working session worksheets were submitted, and a total of 98 different organizations and service groups were identified for collaboration. Many responses included cross-sector collaboration between education providers, healthcare providers, social service organizations, addiction treatment programs, leisure and recreation programs, and child and family service providers. Thirty-three agencies that were identified in the worksheet responses (one-third of those mentioned) were not represented at the Lethbridge Resilience Day. This indicates that although the event successfully brought together a strong representation of community organizations, it would be beneficial and desirable to engage more key players in the communities of practice.

The AFWI created an interactive Lethbridge community map³⁸ that depicts these organizations and the connections between them. The map is a living representation of the community that is intended to be continuously updated. The AFWI team will remain in contact with Lethbridge community partners to gather more information about their inter-agency collaborations. As the map is further developed, it will serve as a valuable resource for community organizations to visualize their place in the larger system and identify new avenues for collaboration and referral.

Moving forward, the Palix Foundation will work to connect key community partners as identified in the working session through training, communities of practice, and future opportunities for collaboration.

³⁸ Lethbridge Community Map. (2023, Sept 1). Kumu. Retrieved September 1st, 2023, from https://embed.kumu.io/008d0a2a080affb5bf3c4a0a5ab675ba#lethbridge-community-mapping

How can the Palix Foundation and City of Lethbridge support your organization in achieving these goals (e.g., providing resources, training sessions, facilitating introductions)?

The common themes that emerged include a desire for further and more frequent training, support in the form of providing resources and funding, and for the MOU partners to facilitate further inter-agency networking. Note: Although question five specifically asked participants to share how the MOU partners could support their organization, if participants mentioned actions to be taken by the MOU partners in their response to Questions one to four, they are included here.

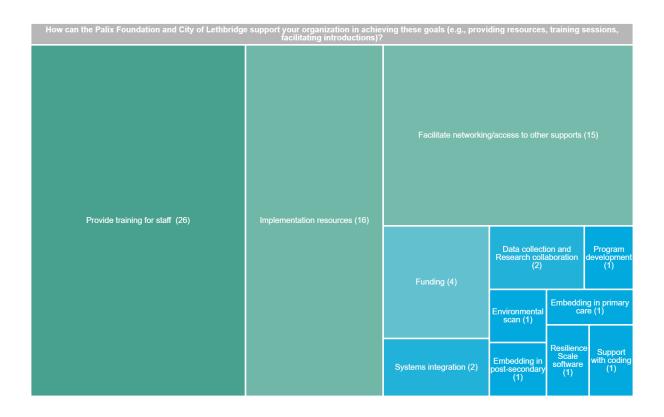


Figure 11. This figure represents a summary of the themes identified from participant answers to the question "How can the Palix Foundation and City of Lethbridge support your organization in achieving these goals (e.g., providing resources, training sessions, facilitating introductions)?" The number in parentheses following the theme indicates the frequency of response. The size of the box indicates the relative frequency of response.

Participants identified that additional training sessions would be the primary way the MOU partners could provide support to organizations looking to embed the Brain Story in their work.

"Training sessions on a more frequent basis. An easily accessed/concise course for organization who feel they can't dedicate the required time for the full certification."

- Participant, Government

"Opportunity for training (train the trainer) for staff to better understand the concepts of the Brain Story and how to implement that knowledge."

- Participant, Children and Family Services

"Making it mandatory to do the certification at all levels. Training session[s] would be beneficial."

- Participant, Anonymous

Complementary to providing additional training, many participants were looking for additional resources to share with staff or aid in their implementation plans.

"Further training/resources and general involvement. How can we build this into our everyday work."

- Participant, Not-for-Profit

"Resources to share with caregivers, educators. Training is very helpful, love learning from the practical ways AFWI translates the science."

- Participant, Children's Programs

"Providing resources, provide training, providing a mainstream system to help provide more support and green box interactions."

- Participant, Leisure and Recreation

Participants also noted that they would value the MOU partner organizations facilitating introductions, collaboration, and providing opportunities for networking between organizations serving similar demographics or working towards similar goals. Additionally, several participants noted an opportunity for a recurring conference/Masterclass presentation to keep organizations engaged.

- "... Yearly conferences so we can all connect and re-do the Masterclass."
 - Participant, Education

"Facilitating introductions."

- Participant, Children and Family Services

"A place to tell stories of collaboration and/or success."

- Participant, Anonymous

The Palix Foundation is actively working on culminating this feedback to support the Lethbridge community according to community members' needs and requests. The Foundation will follow up with those who have expressed interest in this strategy and are encouraged by the level of passion displayed by the Lethbridge community to improve services and outcomes for the Lethbridge and area population. As one participant noted:

"We like how this model unifies everyone and is supportive of all groups. It is the human condition."

Participant, Children and Family Services

Mapping Participant Organizations

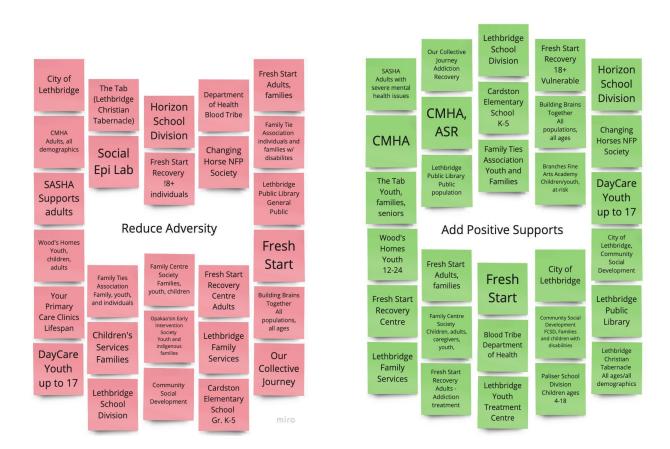


Figure 12. Digital recreation of the final exercise during which participants were tasked with identifying their organization as either red or green according to whether they identify their organization has special skills to reduce adversity (red) or add positive supports (green).

EVALUATION

At the conclusion of the day, participants were invited to complete an evaluation form to share their feedback on the structure of the event and the overall learning experience. Forty-six participants completed the evaluation. A summary of the responses is presented, along with some selected quotes from the open-ended questions.

Please share any thoughts you have on the Resilience Scale activity that you completed following Part 1

"Excellent tool - great for addressing need and supports - very visual and easy to understand."

- Participant, Social Services

"An excellent self-assessment tool. As strong visual learners, the clients can identify their situations and strengths to increase green boxes."

- Participant, Healthcare

"Simplified a complete topic."

- Participant, Government

PLEASE SHARE AN "A-HA" MOMENT FROM PART 2: WHAT DO ORGANIZATIONS DO?

"We are surrounded by powerful people with amazing insight who long to build connection for the health of a population."

- Participant, Healthcare

What actions will you and/or your organization take as a result of attending this event?

"Talk to co-workers about Resilience Scale, use Brain Story when assessing families for needs and supports."

- Participant, Social Services

"We will be pushing/advocating for staff to get certified."

Participant, Children and Family Services

"Ensuring everyone has completed the Brain Story + is implementing it into daily work + large scale w/ agencies."

- Participant, Not-for-Profit

"I plan to review how I can bring my clinic team onboard to teaching families about resiliency."

- Participant, Healthcare

"Work towards common language."

- Participant, Government

PLEASE SHARE ANY THOUGHTS YOU HAVE ON THE REFERRAL NETWORK TOOL.

"Very good idea to have all resources in one place - ease access for service provider and client."

- Participant, Post-Secondary, Healthcare

"It would be extremely useful and make navigation easier and more streamlined for everyone."

- Participant, Addiction Services

"This is an organized efficient tool that provides excellent continuity of care. To decrease barriers of time lapse in service delivery. This is an excellent tool to address and take advantage of the "opportunity of care" especially working with addictions."

- Participant, Healthcare

"Huge! Our preliminary research findings really support this idea."

- Participant, Post-Secondary

"We need this ASAP! Would use 100%."

- Participant, Not-for-Profit

"I've seen lots of false starts of trying to put together a referral network but where I think the problem comes in is we needed a framework of similar language and assessment. I believe this will happen now and the referral network will work better."

- Participant, Children and Family Services

"Would be easier because so many organizations don't know what is available to them. So many fall through the cracks because of uncertainty of where to refer."

- Participant, Education

Do you have other suggestions for us about how we can help enable Brain Story science in practice?

"Incorporating the Brain Story as part of the school programs within the classroom in health class for middle school and grade 9 high school, also grade 12 adolescents. It would be of tremendous value."

- Participant , Post-Secondary

"Simplified version of training for service providers for easier access."

- Participant, Government

"Maybe make it mandatory for all in this field."

- Participant, Not-for-Profit

DO YOU HAVE ANY OTHER COMMENTS THAT YOU WOULD LIKE TO ADD?

"Very interesting: My first time. I knew nothing of the Brain Story. Eye opener for me. Keep up the good work."

- Participant, Education, Other

SUMMARY OF EVALUATION

Overall, the feedback from Lethbridge Resilience Day was very positive. An average of 99% (range: 96 to 100%) strongly agreed or agreed with statements about how the day was run and 88% (range: 59 to 100%) strongly agreed or agreed with positive statements about their learning from the day. The area that participants reported the least change in understanding (average 61% strongly agreed or agreed) was the FOI template; a significant proportion of people indicated no change in their understanding of how the FOI could be used to catalog services (41%) or assist clients or patients in identifying services best suited to meet their needs (37%). However, the responses to the question "How do you feel about a Referral Network tool coded by What Organizations Do?" were very favorable, with 85% of participants rating the statement as eight or higher (out of 10). This could indicate that people have an inherent understanding of the value of coding organizations to a referral network but did not make the connection to the term "Frontiers of Innovation." Two-thirds of participants (67%) considered the concept of a referral network based on system coding as new or different according to a rating of eight or higher. Participants' responses also revealed an interest in a digital version of the Resilience scale, with 89% selecting eight or higher for how they feel about it and 65% selecting eight or higher for it being new or different.

Consistent with the scaling questions, the participants' comments demonstrated much appreciation and enthusiasm for the Brain Story and Resilience Scale. Several individuals

expressed that the Resilience Scale is useful for its simplicity and visual representation of an individual's life. Many indicated an intent to take the information and tools from the day into their practice as well as to share it with their teams and leadership.

NEXT **S**TEPS

FURTHER RESILIENCE SCALE TRAINING FOR THE COMMUNITY

Building a shared understanding of the Brain Story and Resilience Scale will be integral to embed the content within the Lethbridge community. Cross-sector collaborations are most effective when service providers share a unified understanding of what individuals need and how organizations and communities can work together to provide it. Feedback from Lethbridge Resilience Day revealed that the community is eager to have individuals, families, and communities trained in the Brain Story. The Palix Foundation is responding to this request by making further training opportunities a priority. In the coming year, the Foundation will offer multiple training dates that will bring together key partners in Lethbridge and surrounding areas to learn more about the science of resilience and how they may begin or advance the use of the Resilience Scale in their work. The Palix Foundation will make the Masterclass training as accessible as possible and will make every effort to accommodate specific organizational needs. The main priority is that the information contained within the Brain Story becomes integrated into the broader Lethbridge community, which will enable programmatic and system-level shifts to improve outcomes for individuals, families, and communities.

COMMUNITIES OF PRACTICE

The feedback shared following Lethbridge Resilience Day demonstrated a high level of interest in inter-agency collaboration from participants, especially to advance knowledge of available services and improve referrals. To increase engagement and leverage this interest, the MOU partners will facilitate the formation and initial meetings of communities of practice. These communities of practice will consist of ongoing working-group sessions where representatives from community organizations will collaborate and work towards service improvement based on the knowledge of the Brain Story. The Palix Foundation is using the feedback from Working Session two to create communities of practice by partnering organizations that work with similar populations or those that work towards common goals. The intent is that these communities of practice will become a community-led initiative that enables participants to make decisions that align with community needs and Brain Story knowledge. The shared language that participants have acquired through the Brain Story and Resilience Scale Masterclass will support clear communication going forward, enabling them to meet their goals and support the needs of their organizations and the communities they serve.

COMMUNITY CODING

In 2022, the Palix Foundation launched a quality improvement proof of concept to evaluate whether the Resilience Scale and FOI template (see Part 2: What Do Organizations Do? of the Resilience Masterclass) could be used to effectively and efficiently catalog programs and services on a large scale (e.g., community, regional, provincial). Beginning in a small number of candidate organizations in and around Calgary, Alberta, the goal of the proof of concept was twofold. First, the project was designed to assess if coding services and programs using the Resilience Scale and FOI template would offer participating organizations/service providers an opportunity to reflect on the services they offer and identify which services are best suited to their client's and/or patient's needs. Second, the project explored the feasibility of the coding system across a range of organizations to determine if this quality improvement framework could be used to facilitate a referral network that positions services along a continuum of care from prevention to intervention, treatment, and recovery. An evidence-based referral network founded in the science of the Brain Story and Resilience Scale would help individuals and service providers navigate a large and complex system, as well as facilitate communication and collaboration among providers. Responses from Working Session two indicated a strong interest from community partners to begin coding programs offered by their organizations. The Foundation will continue collaborating with Lethbridge community partners to code available programming and develop this referral system so that service providers and the public can easily access services according to individual, family, and community needs. For more detail on this part of the Resilience Scale Framework, see Report 2 of 3: Brain Story: Organizational Change Management. Quality Improvement Implemented Using the Resilience Scale: An Alberta Family Wellness Initiative Proof of Concept.

APPENDIX 1: THE RESILIENCE SCALE AS A CLINICAL TOOL

The following images illustrate the potential of the Resilience Scale in practice, as an individual tool, to address organizational change, and to improve systems integration.



Figure A1.1. The Resilience Scale serves as a clinical tool in practice. In this photo, a Service Provider and Client discuss the Clients red and green boxes using a model of the Resilience Scale.

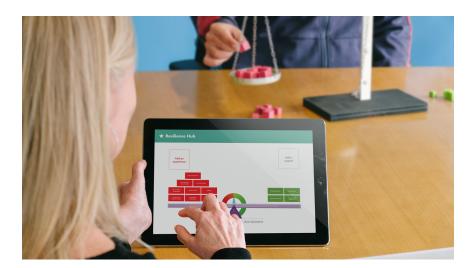


Figure A1.2. A 2-D version of the Resilience Scale would allow Service Providers to document their Clients' experience as it is relayed to them. In this photo, the Service Provider creates a rendering of the red and green boxes the Client has shared with her. This process can be done effectively using paper and pencil.



Figure A1.3. The Resilience Scale can be used at intake, to assess change over time and to identify priority areas of care. In this photo, the Service Provider is able to share the rendering with the Client and asks, "does this look like what you have described to me?" and "is there anything here you would like to address?" This scale can then be shared with other Service Providers should the Client wish.

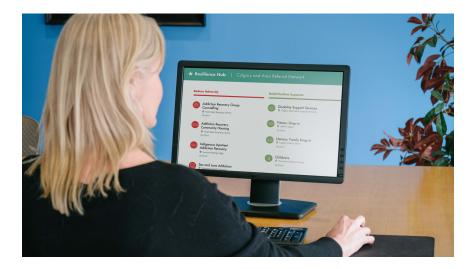


Figure A1.4. At an organizational level, the Resilience Scale can be used to code services and programs according to which principle of the Resilience Scale they address (reduce adversity, add positive sports, or improve skills and abilities). This enables organizations and social service providers to inventory their services and programs, identifying if they are achieving their intended outcome or serving the intended demographic. This information can then be used to develop a referral network organized according to the principles of the Resilience Scale. In this photo, the Service Provider uses an online referral network code according to the principles of the Resilience Scale to navigate available services and programming.

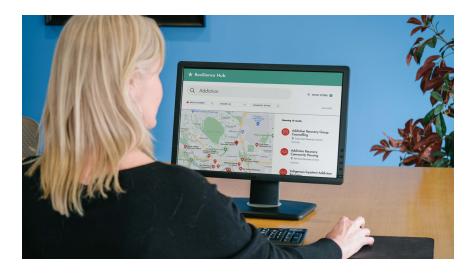
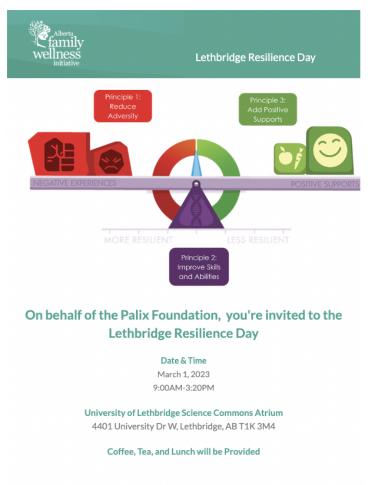


Figure A1.5. Moreover, a referral system based on the Resilience Scale and founded in a common competency will improve system integration. In this photo, the Service Provider uses the referral network to find a service/program able to address the priority area of care for the Client. In this case, the Client identified wanting to address the red box of their addiction, and the Service Provider has identified a drop-in program to address that red box.



Figure A1.6. A common competency is essential to improve outcomes for individuals, families, and communities. In this photo, the Service Provider sends the referral directly to the Client who now knows exactly how they are going to address the red box they identified with the Service Provider at intake.

APPENDIX 2: LETHBRIDGE RESILIENCE DAY INVITATION



Resilience is the ability to adapt and remain healthy in the face of adversity and can be strengthened or weakened over time in response to our experiences. The Resilience Scale tool developed by the Palix Foundation (Alberta Family Wellness Initiative) helps to illustrate how three factors interact to determine resilience: adversity, positive supports, and acquired skills and abilities. The Resilience Scale aligns perfectly with the Harvard Centre on the Developing Child's Frontiers of Innovation template for coding interventions according to their context and primary design principles; interventions occur in various settings (e.g., medical clinic, childcare setting, community setting) and are designed to target specific components of resilience by reducing adversity, adding positive supports, or improving skills and abilities.

The Lethbridge Resilience Day will consist of 3 main components:

Part 1: Lethbridge Strategy and Masterclass Update

Part 2: Panel discussion about real life Brain Story experiences

Part 3: Community Working Session

YES, I WILL ATTEND, MARCH 1, 202

SEND YOUR REGRETS

APPENDIX 3: LETHBRIDGE RESILIENCE DAY AGENDA

Time	Activity
8:30am – 9:00am	Registration and Pre-Session Networking
9:00am – 12:00pm	Lethbridge Strategy Presentation
	Masterclass Update
	Part 1: What Do Individuals Need?
	Working Session – Using the Resilience Scale with Individuals
	Part 2: What Do Organizations Do?
	Part 3: What Does the System Have?
12:00am – 12:30pm	Lunch
12:30pm – 2:30pm	The Brain Story in Practice – Presentations by the Community
2:30pm – 3:20pm	Community Working Session and Table Discussions

Appendix 4: Lethbridge Strategy - February 28th, 2023

OBJECTIVE

Develop a strategy to fulfill the Memorandum of Understanding between the Palix Foundation (Alberta Family Wellness Initiative), City of Lethbridge, and University of Lethbridge to embed the Brain Story within the Lethbridge community.

Engage the Community

Host a series of sessions throughout the community for diverse groups of knowledge users aimed at disseminating the knowledge of the Brain Story and introducing practical tools for organizations and individuals. Sessions can vary in their structure and content to suit the audience and setting.

For example:

- Lunch-and-learn sessions in the community for businesses and community organizations
- Evening and weekend sessions in the community for the public
 - Potentially divided by target audience parents of young children, adolescents, seniors, Indigenous peoples
- Lectures for University students
- Assemblies and workshops in schools for children and adolescents, such as during Mental Health Awareness Week.

Sessions can be provided by Palix Foundation staff with appearances by University members, City of Lethbridge representatives, and Brain Story champions.

Potential topics/content areas:

- Resilience Scale Masterclass (Part 1: What Do Individuals Need? Part 2: What Do Organizations Do? Part 3: What Does the System Have?)
- Policy and progress updates
- The Brain Story as a lecture series
- TELUS Spark material (six, one-hour interactive sessions geared towards parents and young children focused on the main topics on the Brain Story)

DEVELOP COMMUNITIES OF PRACTICE

Communities of Practice (CoPs) convene individuals with a common knowledge base and language so that they can collaborate to achieve better outcomes for families, and communities in Lethbridge and area. We can leverage the Palix Foundation's extensive network and the competency in the Lethbridge region to create several CoPs focused on improving outcomes for children, families, and communities. CoPs can be composed of community members, city officials, University members, and Palix Foundation staff who share a common goal that can be achieved by embedding the Brain Story.

CoPs can be designed based on target population or field of work.

Target Populations:

- Young children (zero to five years old)
- Children (six to 12 years old)
- Adolescents (13 to 17 years old)
- Adults (18 to 64 years old)
- Parents and children
- Seniors (65+ years old)

Lethbridge Resilience Day (March 1st, 2023) will function as the preliminary meeting of the Communities of Practice (CoPs) by connecting attendees with others who work within Lethbridge and area to create a referral network for services and utilize all community assets to improve outcomes for families, and communities. The Lethbridge CoPs will serve as the learning platform that will help inform other communities about application of the Brain Story in policy and practice at a civic and regional level. During the final part of the day, groups will have time to discuss their vision for their organization, what support they would need to achieve their goals, and other groups with which they would like to collaborate within a CoP. The Palix Foundation will provide oversight and support for the CoPs as they define their goals and approaches to achieving their goals.

APPENDIX 5: PARTICIPANTS OF LETHBRIDGE RESILIENCE DAY

Sector	First Name	Last Name	Organization
Addiction Services	Anise Marie	Fast	Fresh Start Recovery Centre
	Anton	Kokol	Fresh Start Recovery Centre
	Brandi	Peterson	Fresh Start Recovery Centre
	Brittany	Isenor	Fresh Start Recovery Centre
	Bruce	Holstead	Fresh Start Recovery Centre
	Chasen	Miko	Fresh Start Recovery Centre
	Jennifer	Kent-Charpetier	Fresh Start Recovery Centre
	Kyle	Keenan	Fresh Start Recovery Centre
	Robby	Sidhu	Fresh Start Recovery Centre
	Lauren	Healey	Our Collective Journey
	Ryan	Oscar	Our Collective Journey
Children and Family	Jimmi-Lynn	Kinnee	Children's Services
Services	Maral	Kiani Tari	Family Centre Society of Southern Alberta
	Becky	Fitton	Family Ties Association
	Darcy	Nalder	Family Ties Association
	Sandra	Mintz	Lethbridge Family Services
	Tracy	Rocca	Lethbridge Family Services
	Cathy	Twigg	Opokaa'sin Early Intervention Society
	Chantilly	Prairie Chicken	Opokaa'sin Early Intervention Society
	Joelle	Weasel Bear	Opokaa'sin Early Intervention Society
	Joellen	Smith	Opokaa'sin Early intervention Society
	Laine	Blood	Opokaa'sin Early Intervention Society
	Rose	Boersma	South Region Parents as Teachers
Children's Programs	Sam	Machan	Big Brothers Big Sisters of Lethbridge and District
	Vicki	Hazelwood	Building Brains Together
Early Childhood Education	Tobi	Horon	Hands on Early Learning Center

	Bailee	Procee	Sunny South Day Care
Education	Angela	Miller	Horizon School Division
	Rylee	Beland	Horizon School Division
	Ramona	Big Head	Kainai Board of Education
	Cecilia	Watt	Lethbridge School Division
	Rochelle	Neville	Lethbridge School Division
	Diane	Moncrieff	Palliser Regional Schools
	Bonnie	Bunkis	Peel Board of Education
Faith Groups	Frank	Allen	Lethbridge Christian Tabernacle
	Heidi	Schaaf	Lethbridge Christian Tabernacle
Government	Alli	Moncrieff	City of Lethbridge
	Kelly	Smith	City of Lethbridge
	Matt	Pitcher	City of Lethbridge
	Takara	Motz	City of Lethbridge
Healthcare	Patti	Knife	Blood Tribe Department of Health
	Kira	Scott	Campbell Clinic
	Debra	Gazeley	Self-Employed Psychotherapist
Leisure and	James	Nelson	Branches Fine Arts Academy
Recreation	Jessica	Groeneveld	Branches Fine Arts Academy
	Bonnie	Mikalson-Andron	Lethbridge Public Library
	Natasha	Fox	Lethbridge Public Library
Not-for-Profit	David	Gabert	Canadian Mental Health Association
	Gina	Tran	Canadian Mental Health Association
	Richard	Drimoth	Canadian Mental Health Association
	Chelsea	Eastman	Volunteer Lethbridge
	Hayley	Thompson	Wood's Homes
	Tatiana	Bran	Wood's Homes
Post-Secondary Education	Kathleen	Vink	Lethbridge College
	Allonna	Harker	University of Lethbridge
	Annette	Bruised Head	University of Lethbridge
	Bonnie	Lee	University of Lethbridge
	Brandie	Lea	University of Lethbridge
	Bryan	Kolb	University of Lethbridge

	Chris	Hosgood	University of Lethbridge
	Claudia	Gonzalez	University of Lethbridge
	Esther	Ekpe Adewuyi	University of Lethbridge
	Jody	Villemaire	University of Lethbridge
	Kevin	Healy	University of Lethbridge
	Kushran	Gupte	University of Lethbridge
	Madison	Gal	University of Lethbridge
	Mahala	Swisterski	University of Lethbridge
	Megan	Hebert	University Of Lethbridge
	Robbin	Gibb	University of Lethbridge
	Rose	Fox	University of Lethbridge
	Setare	Tohidi	University of Lethbridge
	Stephanie	Lowrie	University of Lethbridge / Alberta Health Services
	Alivez	Alarki	
Social Services	Beate	Lahiji	Community and Social Services
	Christopher	Campbell	Sik-Ooh-Kotoki Friendship Society
	Cheyenne	Smith	Southern Alberta Self-Help Association
	Gina	Robinson	Southern Alberta Self-Help Association

APPENDIX 6: LIST OF PARTICIPATING ORGANIZATIONS

Alberta Health Services (AHS)

Part of Canada's first and largest provincewide, integrated health system, responsible for delivering health services to more than 4.4 million people. AHS has 106 acute care hospitals, five stand-alone psychiatric facilities, 8,523 acute care beds, 28,360 continuing care beds/spaces and 3,077 addiction and mental health beds/spaces, plus equity partnership in 40 primary care networks.

Big Brothers Big Sisters of Lethbridge and District (BBBS)

Big Brothers Big Sisters is making a positive difference in the lives of youth by developing and implementing a wide range of mentoring programs. BBBS provides professional, trained staff to carefully screen volunteers and match them in long-term, safe mentoring relationships while providing necessary ongoing management and support for the volunteers, children, and families all free of charge.

Blood Tribe Department of Health (BTDH)

The Blood Tribe Department of Health (BTDH)'s mission is to improve, promote, and deliver accredited Health Services on the Blood Reserve and support Chief and Council in ensuring the protection of treaty health rights.

Building Brains Together (BBT)

Building Brains Together (BBT) builds adult capabilities to improve brain development and executive functions in children through research and education. Their goals are continuous evidence-based learning, resilient children, and empowered adults to have authentic engagement and to support child brain development. All of BBT's work closely aligns with the AFWI.

Branches Fine Arts Academy

Founded in 2020, Branches Fine Arts Academy is a place where students from all backgrounds can come to study music, meet new friends, and learn how to express themselves through music. They offer a safe and enriching musical space for students to learn an instrument, and grow in community, collaboration, and creativity. Most importantly, we have fun while we learn! Designed specifically for low-income or vulnerable families their program is fully funded and completely free to their students.

Campbell Clinic

The Campbell Clinic, founded in 1906 by Dr. Peter Campbell, is one of the largest clinics in Southern Alberta. The Campbell Clinic currently has three locations, Campbell Clinic South, Campbell Clinic West, Campbell Clinic Coaldale with a total of 24 doctors between the sites. They have 20 GP's and four specialists. The specialties are Neurology, Pediatrics, Internal Medicine/Respirology and Psychiatry.

Canadian Mental Health Association (CMHA)

As a nation-wide, voluntary organization, the Canadian Mental Health Association (CMHA) promotes the mental health of all and supports the resilience and recovery of people experiencing mental illness. The CMHA accomplishes this mission through advocacy, education, research, and service. CMHA branches across Canada provide a wide range of innovative services and support to people who are experiencing mental illness and their families. These services are tailored to the needs and resources of the communities where they are based. One of the core goals of these services is to help people with mental illness develop the personal tools to lead meaningful and productive lives.

Children's Services

Children's Services offers a range of supports and resources for children, youth, and families in seven regions across the province. This includes Calgary, Central, Edmonton, Northeast, Northwest, North Central, Southeast, and Southwest regions. Culturally specific services are also provided through Metis and Indigenous Children's Services offices and Delegated First Nation Agencies.

City of Lethbridge

Community Social Development (CSD) is responsible for working in the community and with the community to implement Social Policy in Lethbridge through the administration of social service contracts. The City of Lethbridge social policy envisions a city in which all individuals, families, and communities have opportunities for healthy development leading to social well-being.

Family Centre Society of Southern Alberta

The Family Centre is a non-profit organization based in Lethbridge, AB, that provides a wide range of intergenerational programming for children, parents, caregivers, and families across southern Alberta, including early childhood programming, parent education and support, and family support services.

Family Support for Children with Disabilities (FSCD)

The FSCD program is based on the Family Support for Children with Disabilities Act (FSCD Act) and the FSCD Regulation. They work in partnership with eligible families of children with disabilities to help parents with supports and services to raise their child and promote their healthy development; encourage their child to take part in activities at home and in community; maintain guardianship, responsibility for decision-making and usual expenses to raise a child until they are 18 years old; with some of the extraordinary costs related to their child's disability.

Family Ties Association

Family Ties Association is an incorporated non-profit organization providing family-focused and strength-based services in Southern Alberta since 1990. Family Ties Association helps families, youth, and children to become more independent and successful in their lives. Family Ties provides trained and dedicated staff who work in partnership with other professionals to promote the well-being of individuals and families.

Fresh Start Recovery Centre

Fresh Start Recovery Centre is an addiction treatment center with locations in both Calgary and Lethbridge, AB. Recognizing addiction as a chronic brain disease, it offers treatment and programming to help people 18 years of age and older (and their families) lead fulfilling lives in recovery.

Hands on Early Learning Center

Hands On Learning Centers are a group of licensed family-owned early childhood education centers focused on the enrichment, engagement, and education of their students. Founded by a teacher, they specialize in offering expertly designed curriculums that are challenging, dynamic and age appropriate. They offer a nurturing supportive environment where the care of each child is their top priority. They consider themselves partners to families and believe in open lines of communication between parents and teachers.

Horizon School Division

The Horizon School Division is a rural jurisdiction situated between the cities of Medicine Hat and Lethbridge spanning from Coutts on the Canada/US border to Lomond in the County of Vulcan. The Division provides education services to approximately 3500 students and consists of 20 schools of various grade configurations in the communities of Barnwell, Enchant, Grassy Lake, Hays, Lomond, Milk River, Taber, Vauxhall, and Warner, plus two Christian Alternative School, and three Outreach schools. Additionally, there are 19 Hutterian Brethren schools

scattered throughout the Division as well as one elite sport academy (Vauxhall Academy of Baseball).

Kainai Board of Education

The Kainai Board of Education is the school division for Kainai High School, Tatsikiisaapo'p Middle School, Aahsaopi Elementary School, Saipoyi Community School, and Kainai Alternate Academy.

Lethbridge Christian Tabernacle

For over 50 years, the Tab has existed to bless, serve, and encourage folks from all over. They believe that allowing the kindness of God to shine through them is their best witness of Jesus Christ to the world. The Tab is for everyone: whether young or old, healed or hurting, Christian or not, their simple prayer is that people will be blessed because they came!

Lethbridge College

Lethbridge College teaches the right stuff, with courses and programs that are hands-on, engaging, immersive and good at preparing you for the actual workforce. They have great facilities, with state-of-the-art equipment and, whenever possible, a lot of that southern Alberta sunshine. They hire instructors who are outstanding teachers but also have real-world experience in the fields they teach. And their students and staff contribute to projects that strengthen their campus and improve lives in the community.

Lethbridge Family Services

Lethbridge Family Services provides services through their core departments of Counseling, Outreach, & Education Services, DaCapo Disability Services, Homes Services, and Immigrant Services. The administrative support functions of Advancement & Communications, Business Development, Finance, IT, and Human Resources work with these departments to support their programming needs.

Lethbridge Public Library

The Lethbridge Public Library offers an array of services for use by members of the community including exam invigilation, room rentals, inter library loans, book a computer, surprise me, internet on the go, curbside pickup.

Lethbridge School Division

Since 1886, Lethbridge School Division has offered high quality learning experiences over a broad range of programs to meet the needs of a wide variety of learners. The Division educates over 11,000 students within the City of Lethbridge and employs nearly 1,200 staff members.

Lethbridge School Division takes pride in the breadth of its programs, the expertise of its staff, and the quality of its facilities in 24 schools, and a number of outreach facilities throughout the city. Our schools have a grade structure comprised of Kindergarten to Grade five students in elementary schools, Grade six to Grade eight students in middle schools and Grade nine to Grade 12 students in high schools.

Opokaa'sin Early Intervention Society

Opokaa'sin Early Intervention Society is an Indigenous child and family organization designed to provide support services to Indigenous children and families in Southern Alberta. They have been operating successfully since 1996 and have provided essential child development and support services to Indigenous children, youth, and families.

Opokaa'sin has developed a reputation for excellence and innovation, and the organization is becoming known in Alberta and surrounding provinces as a model for Indigenous service providers. Currently, Opokaa'sin serves over 120 children, youth, and families daily. They strive to provide quality programming while maintaining our Indigenous culture, language, and traditions.

Our Collective Journey

The role of each Our Collective Journey - Recovery Coach (OCJ-RC) plays an important advocacy and support role in the Recovery Oriented System of Care system. An OCJ-RC is someone who has agreed to support others in their recovery pathway. Many recovery coaches have shared experience with the impacts of addiction. They have experienced the struggles, successes, and hope of the recovery process and want to walk alongside others in their journey.

Palliser Regional Schools

Palliser School Division believes that continuous school improvement and the success of students rely on creating a culture of collaboration. They believe that wellness, numeracy, and literacy are foundational to student success and wellbeing. The Palliser School Division offers full public education services to approximately 8,400 students in early learning programs through Grade 12. Palliser has 15 community schools, 17 Hutterian colony schools, 11 faith-based alternative schools, ten of which are in Calgary on nine different campuses, five outreach programs, an online school, and four Low German Mennonite alternative programs.

Peel Board of Education

Peel Board of Education consists of 259 elementary or secondary schools. There are options for specialized programs, night school, summer school, and continuing and adult education programs. At the Peel District School Board, their mission is to inspire the smile within each child. Everything they do is designed to help each child achieve to the best of their ability. Their

collective, daily efforts make a positive difference in the lives of students, their families, and the world.

Sik-Ooh-Kotoki Friendship Society

The Sik-Ooh-Kotoki Society is the longest standing Indigenous organization in Lethbridge. It has been providing programs and services to the Indigenous population of Lethbridge since 1969. Their mission "supports and promotes a self-determined activity which strengthens Indigenous Cultural Distinctiveness." Their vision is an "Improved quality of life (respect, dignity & equal opportunity) for Indigenous people in the urban community."

Their mandate is to provide service to off-reserve, urban Indigenous people in the City of Lethbridge who are in need of a support system to cope with the urban environment and all the challenges it brings.

South Region Parents as Teachers

Parents as Teachers (PAT) is the most widely replicated evidence-based home visitation model in the world. PAT is an innovative, evidence-based model using the best research available on child development to provide the information, support and encouragement parents need to help their children develop optimally during the crucial early years of life. Parents as Teachers model-certified home visitors deliver four components of a cohesive package of services that are designed to identify and build on family strengths, capabilities and skills and build protective factors within the family.

Southern Alberta Self-Help Association (SASHA)

Southern Alberta Self-Help Association (SASHA) is a non-profit community organization whose mission is to support adults with severe and/or persistent mental illness to achieve individual success through a continuum of supportive living options and individualized services. Transitional and long-term supportive housing programs are person centered and strength based, with a focus on achieving improved quality of life and recovery outcomes. Services include supports for co-occurring addictions.

Sunny South Daycare

The purpose of Sunny South Day Care Centre Ltd. is to provide care for children as a complementary extension to the family. Sunny South Day Care Centre Ltd. supports a child's emotional, social, intellectual, and physical well-being. Our program is designed to meet the individual child's basic needs. While all children have the same basic needs, each child is unique and develops at his or her own pace. To meet these needs, Sunny South Day Care Centre Ltd. promotes a child-oriented program where children are encouraged to make choices while learning through play.

University of Lethbridge

Founded in 1967, on traditional Blackfoot land, the University of Lethbridge is home to 8,000 undergraduate and graduate students from around the world. With campuses in Lethbridge and Calgary, they are one of Canada's leading research institutions. Their Blackfoot name, gifted by Elder Bruce Wolf Child, is Iniskim, meaning Sacred Buffalo Stone.

Volunteer Lethbridge

Volunteer Lethbridge exists as a support network for both volunteers and non-profit organizations, helping each to find the answers, assistance, and encouragement they need – so they can do their best work.

Wood's Homes

Wood's Homes is a children's mental health center. They provide treatment and support to children, youth, and families with mental health needs. Wood's Homes is based in Calgary (on three large campuses and in several neighborhoods across the city) with locations in Lethbridge, Strathmore, Fort McMurray, Cold Lake, Lac La Biche and Grand Prairie. Their 500 staff and 100 volunteers provide 40+ programs and services for 20,000 children and their families every year. They are accredited through Accreditation Canada and have earned two Leading Practice Awards, and Exemplary Standing status three times. In 2001, they established a Research Department and in 2016, they launched the Wood's Homes Research Chair in Children's Mental Health, in a partnership with the University of Calgary's Faculty of Social Work.

4.8.



COMMUNITY SAFETY STANDING POLICY COMMITTEE REPORT

Date of Meeting May 12, 2022

Subject Palix Foundation - Memorandum of Understanding

Submitted By Councillor Campbell, Vice Chair - Community Safety Standing Policy

Committee

Recommendation from Community Safety Standing Policy Committee:

BE IT RESOLVED THAT City Council approve a Memorandum of Understanding between the Palix Foundation, University of Lethbridge and the City of Lethbridge to promote the implementation of the Alberta Family Wellness Initiative.

Vote:

In Favour: 3-0 (Unanimous)

Public Speakers at the Meeting: None

Public Submissions: None

Referred back to the Community Safety Standing Policy Committee of June 9, 2022.

Councillor Parker:

BE IT RESOLVED THAT City Council approve a Memorandum of Understanding between the Palix Foundation, University of Lethbridge and the City of Lethbridge to promote the implementation of the Alberta Family Wellness Initiative.

Prior to a vote on the Main Motion, the following motion was presented:

Councillor Paladino:

BE IT RESOLVED THAT Council allow the member of the public to address Council on this matter.

In Favour: Mayor Hyggen, Deputy Mayor Schmidt-Rempel, Acting Mayor Crowson, Councillor Campbell, Councillor Dodic, Councillor Paladino, Councillor Parker

146 of 325

Opposed: Councillor Carlson, Councillor Middleton-Hope	
CARR	IED

Prior to a vote on the Main Motion, the following Referral Motion was introduced:

Councillor Parker:

BE IT RESOLVED THAT this item be referred back to the Community Safety Standing Policy Committee of June 9, 2022.

In Favour: Mayor Hyggen, Deputy Mayor Schmidt-Rempel, Acting Mayor Crowson, Councillor Campbell, Councillor Carlson, Councillor Dodic, Councillor Middleton-Hope, Councillor Paladino, Councillor Parker

CARRIED

Submitted By Deputy Mayor Schmidt-Rempel, Chair – Community Safety Standing Policy Committee

Recommendation from Community Safety Standing Policy Committee:

BE IT RESOLVED THAT City Council approve a Memorandum of Understanding between the Palix Foundation, University of Lethbridge and the City of Lethbridge to promote the implementation of the Alberta Family Wellness Initiative.

Vote:

Absent: Councillor Parker **In Favour:** 3-0

Public Speakers at the Meeting: None

Public Submissions: None

Submitted By Michael Boh, CWSS Manager

Purpose

To submit the proposed Memorandum of Understanding to the Community Safety SPC for City Council approval.

Recommendation(s)

BE IT RESOLVED THAT the Community Safety SPC recommend that City Council approve a Memorandum of Understanding between the Palix Foundation, University of

Lethbridge and the City of Lethbridge to promote the implementation of the Alberta Family Wellness Initiative.

Summary

- A foundational principle of the <u>Community Wellbeing</u> and <u>Safety Strategy</u> (CWSS) is achieving individual and family wellbeing. This same principle is shared by the Palix Foundation who created and delivers the <u>Alberta Family Wellness Initiative (AFWI)</u>. The primary goal of the AFWI is to improve outcomes in health and wellbeing for children and families. To accomplish this goal, the foundation recognized the critical gap that exists between current scientific knowledge about brain development, mental health, and addiction and what is actually done in policy and practice.
- This memorandum of understanding is to formalize a collaboration between the Palix Foundation, University of Lethbridge and the City of Lethbridge to promote the implementation of the Alberta Family Wellness Initiative.

Strategic Alignment

- <u>City Council 2022 Action Plan Healthy and Diverse:</u> Prioritize healthsupporting developments and the wellbeing of all residents.
- <u>Community Wellbeing and Safety Strategy:</u> The work of the CWSS focuses on holistic wellbeing and community-derived solutions tailored to Lethbridge's social landscape.
- <u>Corporate Strategic Plan Partnership Excellence:</u> We will enhance existing
 partnerships and establish new ones with key partners bot out in the community
 and within the City of Lethbridge as an organization.

Background and Prior Decisions

- <u>February 10, 2022: Community Safety SPC</u> received a presentation facilitated by the Palix Foundation regarding the Brain Story & resiliency scale. The presentation was received for information.
- The Alberta Family Wellness Initiative (AFWI) was launched in 2007, but its roots go deeper. In 2004, the <u>Palix Foundation</u> (then the Norlien Foundation) set out to improve child and family health and wellbeing across Alberta. As the initiative progressed, it expanded its mandate and agenda.
- The University of Lethbridge has been a leader in completing scientific research
 for the AFWI, and the City of Lethbridge has facilitated what is actually done in
 policy and practice by funding practical application-based programs in
 Lethbridge. Lethbridge's community has also been a leader in promoting the
 AFWI.
- Lethbridge has the highest per capita number of individuals that that have completed the Brain Certification Story course. Lethbridge Police Service has recently implemented a policy that staff must complete this course.
- To achieve individual and family wellbeing, preventative methods are required and the AFWI is key to achieving this goal.

Analysis and Options

- Approval of this collaboration will accelerate our goal of achieving individual and family wellbeing in our community.
- Embedding the AFWI's Attributes within the City of Lethbridge will foster greater understanding of brain development, mental health and addictions. Integrating this foundational understanding will facilitate effective service delivery and response to Lethbridge's diverse community.
- · Should the MOU not be approved, the City continues as is.

Implications

Community/Citizen

- Leveraging the AFWI's Attributes is another mechanism to enhance community wellbeing through education while strengthening partnerships with key organizations;
- Greater public understanding through capitalizing upon public engagement and communications to disseminate the AFWI Attributes through City means.

Financial

- No anticipated cost associated with leveraging the AFWI Attributes, as the City will look to embedding the Attributes in existing processes, projects and initiatives.
- · Further, the Brain Story certification is a course offered at no cost.

Risk

An MOU ensures this work continues and provides the parameters to do so; without an MOU, this work could lose focus or be stalled.

Corporate

- Impact to the corporation is not anticipated; however, efforts to center the AFWI Attributes may occur internally (e.g. assessing how a business unit might begin to embed the Attributes to their practices).
- Our Corporate Strategic Plan will be supported by way of greater corporate understanding and knowledge about the intersection of social determinants of wellbeing and healthy brain development.

Engagement

On February 10, 2022, a condensed Brain Story community session was held.
 With 350 registrants and 221 attendees, the event highlights interest in learning more about the intersection of social determinants of wellbeing and healthy brain development.

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Implementation and Communication Plan

 Once the MOU is approved, the City of Lethbridge will begin to execute disseminating and leveraging the AFWI Attributes within existing programs and processes, while identifying other opportunities where the AFWI may be beneficial.

Attachment(s)

• Attachment 1: Draft Memorandum of Understanding

<u>Approvals</u>	
City Treasurer:	Darrell Mathews
A/City Solicitor:	Adam Faust
Department Director:	Michael Fox
City Manager:	Lloyd Brierley

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (the "MOU") is entered into this _____ day of______, 2022.

BETWEEN:

Palix Foundation

(hereinafter referred to as the "Foundation")

and -

The City of Lethbridge

(hereinafter referred to as the "City")

and -

The Governors of the University of Lethbridge

(hereinafter referred to as the "University")

WHEREAS the Foundation has created a series of videos, written materials, and an online *Brain Story Certification* course (the "Course") that are free of charge and openly accessible to the public on the *Alberta Family Wellness Initiative* ("AFWI") website (the "Attributes");

WHEREAS the University's Canadian Centre for Behavioural Neuroscience has integrated the Course into the undergraduate course offering to increase students' understanding of the practical application of the Brain Story;

WHEREAS the City would like to integrate Brain Story knowledge in their services and decision-making;

AND WHEREAS the parties wish to work in collaboration to develop a local strategy for Brain Story mobilization and application in Lethbridge (the "Collaboration") for the ultimate purpose of adopting and delivering a system-based response to improve outcomes for individuals, families and communities; the Foundation, the City and the University (collectively the "Collaborators") will participate in contributing to the learning platform that AFWI has created; the Collaborators' participation and contributions will be further scoped in a project charter that is being developed by the parties together and such contributes will include the collection of data that documents the change and/or barriers to change, which will culminate in a co-generated report;

NOW THEREFORE in consideration of the mutual covenants and agreements contained herein the parties agree as follows:

1. Intention of the Parties

- 1.1 The parties hereto intend to work in the Collaboration to articulate an effective strategy to embed the Brain Story knowledge specifically to the local Lethbridge context, and engage in a mutual learning process centered on understanding the impact of brain story-based interventions at the organization and system level and how to measure this impact on outcomes. Specific contributions of the Collaborators are described in the attached Schedule A, Schedule B and Schedule C, which form part of this Memorandum of Understanding.
- 1.2 It is expected that the Collaboration will be ongoing and adaptive in nature.
- 1.3 The parties will keep each other reasonably informed of their respective work in relation to the Collaboration.
- 1.4 This MOU shall not create a legally binding obligation between the parties.

2. Palix Foundation Commitments

- 2.1 The Foundation will continue to make the Attributes publicly available at no cost via the AFWI website.
- 2.2 The Foundation will continue to engage with the City and the University, to facilitate efforts to apply the Brain Story and AFWI approach in Lethbridge, based on what we know from the AFWI developmental evaluation and elements of the AFWI Theory of Philanthropy catalytic convening, knowledge entrepreneurship, and collaboration with public systems.
- 2.3 The Foundation may disclose, in its marketing materials or otherwise, that it is working with the City and the University in this Collaboration. In these cases, the Foundation will use the City's and University's name or logo only, and reflect the Collaboration in a positive manner. For any additional uses, the Foundation will seek approval from the City and the University.

3. City Commitments

- 3.1 The City will continue to keep the Foundation reasonably apprised of its use of the Attributes.
- 3.2 The City will provide the University and the Foundation with feedback, reports, outcomes, and evaluations related to the Collaboration if and as they come available.
- 3.3 The City will use and adapt (where required to suit the Lethbridge context) the AFWI Attributes, remaining consistent with the Collaboration strategy.

- 3.4. The City will promote the Collaboration, the Course and the Brain Story™ brand in a manner consistent with AFWI framing and terminology, of a reasonably good (or better) quality and not in a manner that is likely to reflect negatively on the Collaboration, the Course, the Brain Story™ brand, the Foundation or the University. The City will consult with the Foundation and the University with any uncertainty or discrepancy of messaging.
- 3.5. The City's use of the Brain Story™ trademark, and all other trademarks in or associated with the Attributes, enure solely to the benefit of the Foundation. The Attributes are being provided to the City for use on an "as-is" "where-is" basis.

4. University Commitments

- 4.1. The University will continue to keep the Foundation reasonably apprised of its use of the Attributes.
- 4.2. The University will provide the City and the Foundation with feedback, reports, outcomes, and evaluations related to the Collaboration if and as they come available.
- 4.3. The University will use and adapt (where required to suit the Lethbridge context) the AFWI Attributes, remaining consistent with the Collaboration strategy.
- 4.4. The University will promote the Collaboration, the Course and the Brain Story™ brand in a manner consistent with AFWI framing and terminology, of a reasonably good (or better) quality and not in a manner that is likely to reflect negatively on the Collaboration, the Course, the Brain Story™ brand, the City or the Foundation. The University will consult with the Foundation and the City with any uncertainty or discrepancy of messaging.
- 4.5. The University's use of the Brain Story™ trademark, and all other trademarks in or associated with the Attributes, enure solely to the benefit of the Foundation. The Attributes are being provided to the University for use on an "as-is" "where-is" basis. In the event a third party brings a claim against the Foundation related to the University's misuse or negligent alteration of the Attributes, the University agrees that it will indemnify and hold harmless the Foundation from any losses relating to such a claim.

Reservation of Rights

5.1. The use of the Attributes for the purposes of this MOU is granted on a non-exclusive basis, the Foundation reserves and retains all rights, title and interest in the Course and the intellectual property therein, including all copyright and license rights associated with the Attributes, the Course, and shall at all times, anywhere in the world, have the right to use or authorize others to use the Attributes and the Course in any way as the Foundation may desire.

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6. Termination

6.1. Any party may terminate this MOU at any point with 60 days' prior written notice.

7. Term and Start Date

7.1. The term of this MOU shall be for a period of two (2) years, (the "Term") starting upon date of final execution by all parties of the MOU.

8. Miscellaneous

- 8.1. This MOU shall be governed by and construed in accordance with the laws of the Province of Alberta.
- 8.2. This MOU may be executed in one or more counterparts, and may be delivered by facsimile or by electronic mail in Portable Document Format (PDF), each of which when so executed shall be deemed to be part of the original and shall have the same force and effect as the original, and all of which together shall constitute one and the same MOU.

IN WITNESS WHEREOF this MOU has been executed by the parties hereto.

By: Dean Prodan, President
Date:
The City of Lethbridge
By: Name and Title:
Date:
The Governors of the University of Lethbridge
By: Dr. Erasmus Okine, Provost & VP (Academic)
Date:

PALIX FOUNDATION

SCHEDULE "A" PALIX FOUNDATION

Brain Story mobilization and application in Lethbridge: A Collaboration between the Palix Foundation, City of Lethbridge and University of Lethbridge

Background

In 2007, the Palix Foundation established the Alberta Family Wellness Initiative (AFWI) as a program to invest in improving the health and wellness of children and families in the province through sharing and promoting the application of knowledge about brain and biological development as it relates to early childhood development, mental health, and addiction (the Brain Story). The Brain Story is based on decades worth of scientific evidence showing that early experiences and environments are biologically embedded in the developing brain and set us on trajectories of good or poor health outcomes across the lifespan. More importantly, the Brain Story has been translated and framed for professionals and the general public through an ongoing collaboration between scientific experts at the Harvard Center on the Developing Child and social scientists at the FrameWorks Institute¹. This translated knowledge base allows non-experts to engage with and understand complex scientific concepts, and apply them toward innovative solutions that can reduce the burden that complex health and social issues, rooted in adverse childhood experiences (ACEs) and intergenerational factors, have on public systems, particularly health, education, human services, and justice.

Based on research funded by Palix, we know that the burden of ACEs is high in the general population in Alberta. In a study of over 4,000 adults in primary care in Calgary, the majority of whom were highly educated, employed, married and middle class or above, roughly two-thirds reported experiencing at least one ACE, and one-third reported experiencing three or more². ACEs cause toxic stress in childhood, which in turn influences gene expression and the development of brain circuits that support executive function, self-regulation and coping skills. The long-term impact of ACEs on health can be thought of as compromised brain circuits leading to poor decision-making, difficulty problem solving and coping with challenges, the adoption of health risk behaviours, and a life course trajectory that is more likely to include additional adversity in adulthood.

Many organizations in Alberta have pivoted to using Brain Story science within their programs and services to either help prevent or mitigate the effect of ACEs in their clients. Within the health sector, Alberta Health Services' Child and Adolescent Addiction, Mental Health and Psychiatry Program in Calgary now formally tracks

¹ Kendall-Taylor N, Levitt P. 2017. Beyond Hat in Hand: Science Advocacy is Foundational for Policy Decisions. Neuron, 94:4. https://doi.org/10.1016/j.neuron.2017.04.039

² See slide deck, "ACEs-A Presentation October 2015"

ACEs in their patients and shares Brain Story concepts with families as a way of motivating the whole family to engage in treatment. In this way, the child's skills improve, the parents' or caregivers' skills improve, and the home becomes a more stable and supportive environment for the entire family. Within the Calgary Foothills Primary Care Network (CFPCN), several clinics are now using ACE history taking as a way to engage patients in meaningful conversations about their mental health and other chronic health conditions they are struggling with. CFPCN's Riley Park Maternity Clinic was the first clinic to pilot this approach to care and also used it as a way to prevent the intergenerational cycle of ACEs by engaging parents in discussions of how they would like to parent their child. These conversations uncovered unmet needs for mental health and parenting supports in many patients, and most reported that it enhanced their health care experience: they felt thankful to be asked, cared for, and better understood by their physician. Fresh Start Recovery Centre, a residential addiction treatment facility for men, has been using the concept of the resilience scale3 to explain how ACEs and ongoing adversity influence core skills and abilities that allow us to cope with challenges, and how safe, stable, supportive relationships and environments help shore up those skills and improve outcomes over time. They have built an interactive, desk top model of the resilience scale for use in therapy groups and report that their clients have a better understanding of how the therapeutic process works and are more motivated to engage in treatment.

The Opportunity

To date, Palix has invested almost \$90 million and has gained over a decade of experience in knowledge mobilization within policy and practice in Alberta and internationally. Our online Brain Story Certification Course has over 44,000 registered users in Alberta alone (86,000 registered users globally). As a result of these sustained knowledge mobilization efforts, we are now seeing the emergence of transformational change in multiple systems and organizations across the province that will support a more robust, comprehensive and coherent response to complex health and social issues versus a fragmented, programmatic or episodic response. Innovative new Brain Story based provincial policy platforms (e.g., Alberta Children's Services Well-Being and Resiliency Framework⁴, Evaluation Framework⁵, and miyo resource⁶) are also paving the way for this next phase. Developmental evaluations of our work indicate that these changes are largely predicated on key decision-makers gaining a deeper understanding of the science and its implications through the translated Brain Story; the emergence of a common standard of knowledge across organizations and systems through integration of the online course into mandatory staff training; and

³ A summary of the resilience scale metaphor and how it works to explain key concepts in brain development can be found here: https://www.albertafamilywellness.org/what-we-know/resilience-scale

⁴ https://open.alberta.ca/publications/9781460141939

https://open.alberta.ca/publications/9781460143377

⁶https://open.alberta.ca/dataset?audience=Indigenous+Peoples&tags=miyo+resource&topic=Government

opportunities for collective sense-making and cross-sectoral, solutions-focussed discussions.

There is now a timely and important opportunity to deliberately encourage and develop a local strategy for Brain Story mobilization and application in Lethbridge, with the objective of adopting and delivering a system-based response to improve outcomes for individuals, families and communities. Several community organizations such as Family Centre, Fresh Start Recovery Lethbridge and the Opokaa'sin Early Intervention Society have already pivoted to using the online Brain Story course as mandatory staff training as has the Holy Spirit Catholic School Division and the Kainai School Board. The Lethbridge Police Service is currently exploring how to use this knowledge in the context of law enforcement. The City of Lethbridge has expressed interest in using Brain Story knowledge in their services and decision-making and the Kainai First Nation has been focused on this work for some time. The University of Lethbridge's Canadian Centre for Behavioural Neuroscience also has a core group of developmental neuroscience researchers who are currently using the online course as a teaching tool for undergraduate students in neuroscience and education (see Schedule "C").

Palix Contribution

Palix offers to serve as the convenor and project manager for this project with the City of Lethbridge and the University of Lethbridge. We are also in the process of seeking interest and representation from the Kainai First Nation. We will provide organizational support with consultants that will help to facilitate strategy, as well as for meetings and convenings at the organizational, institutional, community and provincial government levels.

SCHEDULE "B" CITY OF LETHBRIDGE

Background

The City of Lethbridge is already conducting a number of initiatives that directly pertain to the Alberta Family Wellness Initiative (AFWI) and the Brain Story, such as:

- Lethbridge Police Service (LPS) Training Requirement: Sworn Officers are mandated to complete the full Brain Story training, seeing value in the technical information about addiction and brain development to cultivate greater understanding;
- Community Session on Brain Story & Resiliency Scale: On February 10, 2022, a condensed Brain Story presentation was provided to the general Lethbridge community. The event had 350 registrants and 225 participants;
- City Council Standing Policy Committee Session on Brain Story & Resiliency Scale: On February 10, 2022, the Community Safety Standing Policy Committee received a condensed presentation on the Brain Story's key tenets, helping to broaden knowledge of the Brain Story within City Council:
- Community Wellbeing and Safety Strategy (CWSS) Linkage: The City's CWSS was adopted in 2019. The CWSS, as a whole, focuses on holistic wellbeing and acknowledges that wellbeing may look different to everyone depending on their lived experiences. A foundational principle of the CWSS is achieving individual and family wellbeing, which is a shared principle with the Palix Foundation who created and delivers the AFWI;
- "Building Brains Together" Program: The City of Lethbridge funds the
 "Building Brains Together" program, which works with many Lethbridge
 organizations (closely aligned with the Alberta Family Wellness Initiative),
 and offers resources including workshops and professional development,
 educator and caregiver online courses, and engages in research regarding
 healthy brain development, executive function and resiliency in children;
- "Supporting a Culture of Recovery: A Lived Experience Project": Dr. Cheryl Currie with the University of Lethbridge has begun working on a research project that began with the Reconciliation Lethbridge Advisory Committee (RLAC). The project will focus on pathways to addiction recovery through conducting person-centered interviews. The project will provide a Lethbridge-catered, qualitative assessment of specific challenges and opportunities Lethbridge residents have to cultivating pathways to recovery;
- Integrated Coordinated Access (ICA) System: The City's Community Social
 Development Department has rolled out an ICA network and navigator
 training to better support vulnerable residents connect to services within the
 community;

• Pertinent Partnerships:

 Indigenous Relations: To further the City's commitment to reconciliation and relationship-building with Indigenous Peoples and Communities, a Memoranda of Respect, Understanding and Partnership was signed between City of Lethbridge City Council and the Kainai/Blood Tribe Chief and Council in September 2021. An identified area of shared interest is Health and Wellness. Through strengthening communication and relationship with the Blood Tribe, the City of Lethbridge is able to better respond to and represent Blackfoot and other Indigenous Communities and Peoples in service-delivery responses that support health, wellness, and social inclusion. Understanding the disproportionately negative health outcomes for Indigenous Peoples and Communities due to intergenerational trauma and adverse childhood experiences fueled by settler colonialism, having the Brain Story as a foundation for elected officials helps to further cultivate that empathy, respect and shared understanding within decision-making.

School Divisions: The City of Lethbridge works with local school divisions frequently (e.g. through the CWSS Advisory Committee, and other City Council boards, commissions and committees). Access to superintendents ensures continuous communication and opportunity to leverage the AFWI Attributes in the number of initiatives the divisions and the City mutually take part in.

Strategic Alignment

Corporate or City Council Action Priorities

Additionally, the City of Lethbridge has a number of strategic plans or priorities that significantly align with the AFWI Attributes. Some of these aligning strategies and priorities are:

- Corporate Performance Excellence: One of the key pillars of the City of Lethbridge's Corporate Strategic Plan is *Performance Excellence*. This pillar focuses on "increasing value for customers" and "enhancing personal learning opportunities" for staff. Within Performance Excellence, there is opportunity to encourage the Brain Story to be an offered training to cultivate greater understanding and compassion, particularly for front-line positions (e.g. first point-of-contacts within City Hall).
- Corporate Partnership Excellence: Another key pillar of the Corporate Strategic Plan is Partnership Excellence, which encourages deliberate and intentional partnerships permitting the City to better represent and cater service-delivery to a multitude of diverse residents. Understanding diverse needs of the customers we serve and represent can be benefitted by utilizing the AFWI Attributes.
- City Council Priority "Healthy and Diverse": In City Council's 2022 Action Plan, they identified healthy and diverse as a key focus area, stating that "prioritiz[ing] health-supporting developments and the wellbeing of all residents." Similar to the above points, ensuring thorough understanding of healthy brain development and inhibitors to such fosters greater understanding prior to making impactful decisions for the community.

Communities, a Memoranda of Respect, Understanding and Partnership was signed between City of Lethbridge City Council and the Kainai/Blood Tribe Chief and Council in September 2021. An identified area of shared interest is Health and Wellness. Through strengthening communication and relationship with the Blood Tribe, the City of Lethbridge is able to better respond to and represent Blackfoot and other Indigenous Communities and Peoples in service-delivery responses that support health, wellness, and social inclusion. Understanding the disproportionately negative health outcomes for Indigenous Peoples and Communities due to intergenerational trauma and adverse childhood experiences fueled by settler colonialism, having the Brain Story as a foundation for elected officials helps to further cultivate that empathy, respect and shared understanding within decision-making.

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Strategic Alignment

Corporate or City Council Action Priorities

Additionally, the City of Lethbridge has a number of strategic plans or priorities that significantly align with the AFWI Attributes. Some of these aligning strategies and priorities are:

- Corporate Performance Excellence: One of the key pillars of the City of Lethbridge's Corporate Strategic Plan is *Performance Excellence*. This pillar focuses on "increasing value for customers" and "enhancing personal learning opportunities" for staff. Within Performance Excellence, there is opportunity to encourage the Brain Story to be an offered training to cultivate greater understanding and compassion, particularly for front-line positions (e.g. first point-of-contacts within City Hall).
- Corporate Partnership Excellence: Another key pillar of the Corporate Strategic Plan is *Partnership Excellence*, which encourages deliberate and intentional partnerships permitting the City to better represent and cater service-delivery to a multitude of diverse residents. Understanding diverse needs of the customers we serve and represent can be benefitted by utilizing the AFWI Attributes.
- City Council Priority "Healthy and Diverse": In City Council's 2022 Action Plan, they identified healthy and diverse as a key focus area, stating that "prioritiz[ing] health-supporting developments and the wellbeing of all residents." Similar to the above points, ensuring thorough understanding of healthy brain development and inhibitors to such fosters greater understanding prior to making impactful decisions for the community.

SCHEDULE "C" UNIVERSITY OF LETHBRIDGE

Background

The University of Lethbridge, established in 1967, has grown to be Canada's destination university for all who seek a comprehensive, liberal education-based training by promoting a diverse and inclusive environment; inspiring research-informed teaching and learning; and fostering creative discovery, scholarship, professional endeavors, experiential opportunities and community engagement. As part of the strategic directions of the University, the institution aims to build an internal community and enhance relationships with external communities such as the City of Lethbridge and the Palix Foundation. Through projects such as the Alberta Family Wellness Initiative (AFWI), the University commits to taking action on education, research, policy formation and information exchange necessary to advance this initiative.

The Canadian Centre for Behavioural Neuroscience (CCBN) at the University of Lethbridge was the first established neuroscience department in the country and home to some of Canada's leading neuroscientists. Our faculty have a wide range of interests that span topics such as memory, neuroplasticity, comparative neurology, brain development, neurodegenerative disease, recovery after brain injury, decision making, gambling, play, sleep and stress. And all of our faculty have national and international reputations for their work. The Department is located in the Science Commons, Canada's advanced facility for science education and research. This new \$280-million facility truly puts science on display and will inspire the next generation of researchers, entrepreneurs, and leaders. With open and flexible laboratories, makerspaces and specialized outreach spaces, students from kindergarten to PhD-level, faculty, and community members will have boundless opportunities for handson learning, collaboration and discovery.

Bryan Kolb is a Professor in the Department of Neuroscience who looks at how neurons in the cerebral cortex change in response to experiences including drugs, hormones, stress, and injury, and how these changes influence behaviour. Over the past 45 years he has identified 'rules' that govern the effects of cerebral injury at different developmental ages with a goal of developing treatments to remediate neurodevelopmental disorders in children. Kolb has demonstrated a variety of mechanisms that underlie improvement from adverse perinatal experiences including neurogenesis and synaptogenesis. In addition, he was the first to show (with Terry Robinson at the University of Michigan) that psychoactive drugs produce permanent changes in neuronal structure in cerebral structures, and that these changes influence later brain plasticity. Current work is looking at: 1) the role of traffic noise stress early in life on brain and behavioural development, later brain plasticity, and the onset of dementia; and, 2) the effectiveness of treatments during the neonatal period on

attenuating or blocking dementia onset in a rodent model. Kolb is an Officer of the Order of Canada and a Fellow of the Royal Society of Canada.

Robbin Gibb is a Professor in the Department of Neuroscience. Her research has two main themes: 1. How prenatal and preconception experience influence brain development and 2. How to improve outcomes for preschool and adolescent children by enhancing language, executive function and self-regulation, and motor skills. Aside from teaching commitments and research Dr. Gibb gives talks and workshops to educators, parents, medical professionals and public interest groups on the role of early experience in shaping brain development. Dr. Gibb is a member of the Early Childhood Education Advisory Committee for Lethbridge College and advisor for the Alberta Government Ministry for Children's Services, and leads the Building Brains Together initiative for the City of Lethbridge.

Claudia Gonzalez is a Professor in the Department of Kinesiology and an adjunct to the Canadian Centre for Behavioural Neuroscience. Her research focuses on motor contributions to cognitive abilities through the lifespan and she is co-investigator for the Building Brains Together.

Allonna Harker is an Instructor in the School of Liberal Education and is completing her PhD in Neuroscience at the Canadian Centre for Behavioural Neuroscience. Her in class teaching is focused on delivering several courses on the AFWI's Brain Story wherein students are offered an opportunity to make an in-depth examination of the themes presented in the online Brain Story course. Her research focuses on the influence of fathers and their experiences in the preconception period on brain development in their offspring. Allonna was instrumental in developing the BBT program and continues with BBT as a steering committee member.

The Opportunity

There is an increasing literature on the importance of developing strong executive function (EF) skills in preschoolers and adolescents so they can enjoy better academic performance, stronger relationships, increased resiliency and lifelong success. We know that children are not born with EF skills but develop them over time. The BBT program offers playful activities that target the development and strengthening of EF while building stronger relationships between children and their caregivers or educators. Ultimately by building adult capability around child development and executive function skills, the children in our community will benefit.

University of Lethbridge Contribution

As mentioned above, the University of Lethbridge is home to several internationally renowned researchers in the areas of brain development, neuroplasticity, epigenetics, stress, addiction, executive function, and play – all topics that are implicated in the Brain Story. Therefore, the University serves as a local generator of the science and knowledge that is distributed via the AWFI. The University also produces graduates and post-graduates who are highly trained in this science and able to enter the

workforce with the necessary competencies to effect change in the areas of policy and practice that directly impact the health and wellness of the community.

The Building Brains Together (BBT) program that operates through the University of Lethbridge integrates key elements of the Brain story and the BBT works extensively in the community with other service providers to inform adults about the importance of positive experiences, serve and return relationships, executive functions skills, and protection from toxic stress, to optimize child brain development.

Our pop-up tent events in the City of Lethbridge that focus on play are well attended by parents/caregivers and children alike. We assess the effectiveness of our program materials by testing and retesting and soliciting feedback from the caregiver/educators that participate. We offer workshops to demonstrate practical ways to build executive function skills and promote active skill building for parents/caregivers/educators and service providers. Our website has become a popular resource for adults from the local area and from afar.

The Brain Story is currently a class taught in LBED and cross-listed in Neuroscience. This provides students without a strong STEM background opportunity to learn about the science of child development. Many students who access this course intend to further their studies in Education or Health Sciences. The course also features guest lectures from renowned faculty from the CCBN, providing the students with additional exposure to the research in areas related to the Brain Story, and it further promotes the Building Brains Together program and the information on how to get involved. Undergraduate students benefit from the program through independent studies, volunteer opportunities and summer studentship placements.

The Brain Story is also a requirement of the Master of Education Teaching, Learning, Neuroscience cohort, which facilitates the uptake of the Brain Story among both inservice and administrative educators from K-12.



VICE PRESIDENT, RESEARCH

LETTER OF SUPPORT

31 May 2022

Dear Members of Council and Community Safety SPC,

The University of Lethbridge has a strong tradition of excellence, innovation, and collaboration in advancing knowledge about the brain, child and youth development, and neurosciences research. To that end, UofL researchers are considered some of the foremost thought-leaders in the world.

As part of the University's academic and research programs in the Neurosciences and Psychology teams, Education, Health Sciences and Addictions, and Chemistry and Biochemistry we are proud to support a shared vision with the City and Palix Foundation to translate and dissemination expertise for the betterment of society and community. To that end, I have reviewed the final MOU content and intent, and can confirm that the UofL will be pleased to sign and agree to the terms as written.

Our normal course of action is to sign such agreements after our partners have done so. Thus, we are ready to sign when City Council and Palix Foundation representatives have executed the MOU.

We are pleased to be partnering with both Palix Foundation and the City of Lethbridge on this high impact opportunity to advance The Brain Story and certification. It is inspiring and motivating to see the role of UofL researchers and instructors alongside experts at our partner institutions to both the program and the partnership.

Sincerely,

Dena W. McMartin, PhD, PEng, PAg, FEC, FCSSE

Vice-President, Research

Together, we shine brighter