



The Brain Builders Lab was a joint initiative of the Canadian Centre on Substance Use and Addiction and the Alberta Family Wellness Initiative. Its aim was to move Brain Story science, which links childhood trauma to later health outcomes, into action. Between 2019 and 2021, participants in the Brain Builders Lab undertook projects to spread and embed Brain Story science in their communities. This case study along with the others in the series provides practical advice on how to develop and implement projects, along with project impacts and lessons learned.

## Additional Activities and Lessons

### Brain Builders Lab Case Study

The Brain Builders Lab (BBL) team believes that some of the richest lessons can come from challenges and roadblocks encountered, rather than successes alone. Over the two-year duration of the BBL, several Brain Builders encountered challenges that prevented them from engaging fully in the supported BBL process or bringing their project to completion. Despite this, all remained strong champions for the Brain Story, and much can be learned from their efforts and challenges. This case study summarizes the original goals of each of five Brain Builders, their knowledge mobilization efforts and the challenges they encountered, and the outcomes and lessons learned from their work.

### Project Goals, Knowledge Mobilization Activities, Outcomes and Impact

#### Project Team and Location

**Yuko Baljak**, Instructor, Faculty of Nursing, Langara College, Vancouver, British Columbia

**Goals:** Embed the Brain Story into the undergraduate nursing curriculum at Langara College to reduce stigma around substance use and mental illness, and provide a framework to guide nursing practice in a more trauma-informed way.

**Activities:** Yuko began by sharing information about Brain Story science and the Brain Story Certification Course (BSCC) from the Alberta Family Wellness Initiative with the other five instructors on the mental health team to generate interest and additional champions for embedding Brain Story science into existing courses. At the time, Langara College was undergoing a curriculum review, and Yuko sought the support of the Curriculum Steering Committee to get broader organizational buy-in for her plan. She met with some resistance from faculty members who did not see a need to change their teaching approach, and came up against competing curricular priorities that other instructors were promoting.

Ultimately, it was decided that the BSCC was too theoretical and long to use as a teaching tool, and brain science was not adopted as a priority in the new curriculum. Despite this setback, Yuko built the Brain Story into her own courses and encouraged her students to enrol in the BSCC.



**Outcomes and impact:** All five instructors from the mental health team and all Yuko's students completed the BSCC. She continues to embed Brain Story concepts in the introductory mental health course and encourage students and faculty to take the BSCC. She has also shared the course with nursing faculty via email. Even though Yuko was unable to secure the necessary buy-in to build brain science into Langara's new curriculum, the college has since endorsed the use of the BSCC as a teaching tool for second year undergraduate nursing students. Yuko now sits on the curriculum committee and has discussed with the committee chair the possibility of spreading the BSCC and related concepts over the three-year program to allow all students to complete it. Another significant curriculum change is occurring that will place Brain Story concepts in a later term to complement community nursing.

### Project Team and Location

**Yolande Lawson**, Health Promotion Consultant, Best Start Resource Centre, Health Nexus, Thunder Bay and surrounding region, Ontario

**Goals:** Raise awareness about the importance of early child development among professionals working in Indigenous communities to support a better understanding of intergenerational trauma, reframe the understanding of their own and clients' lives, and begin personal and collective healing journeys.

**Activities:** Yolande was already providing professional development as part of her job, so she included Brain Story concepts in her workshops on Indigenous child development and breastfeeding. The Brain Story concepts resonated deeply with the participants and were well-received. As her breastfeeding workshops were train-the-trainer style, those who attended shared Brain Story concepts in their own workshops to help accelerate the spread of the science.

As an unplanned activity at the BBL kickoff event in Ottawa, Yolande and a fellow Brain Builder discussed the need for a backbone organization to lead cross-sectoral knowledge mobilization efforts in Ontario. When she returned from Ottawa, Yolande began engaging leaders, including the executive director of Health Nexus, her parent organization, to support broader, system-level change. Over time the idea took hold and Health Nexus agreed to champion Brain Story science as part of its ongoing work.

Yolande left Health Nexus during the course of the BBL, but has since shared the Brain Story with staff and clients in her new organization.

**Outcomes and impact:** Participants in Yolande's workshops reported that the Brain Story helped shift mental models, including attitudes and beliefs, and reduced stigma around the Indigenous families they serve, as well as around themselves and their own families. In fact, after one presentation, Yolande was surprised when one of the participants tracked her down at a restaurant to gift her with a traditional ribbon skirt. This gift of gratitude was deeply moving and helped solidify for Yolande that the Brain Story is not only impactful, but can be transformational.

In addition, Health Nexus partnered with Alberta Family Wellness Initiative to focus its [Best Start Conference 2020—Building Health Brains](#), held in March 2020, on Brain Story science. The conference was positioned as a launch for an Ontario-based knowledge mobilization strategy that would be led by Health Nexus. Approximately 300 delegates attended the conference, including several Ontario-based Brain Builders, and Alberta Family Wellness Initiative sponsored the attendance of several conference speakers. The event generated considerable excitement about an Ontario-focused strategy, but the pandemic forced Health Nexus to pause these activities.



## Project Team and Location

**Shauna Reddin**, Student Well-being Teams, Department of Education, Government of Prince Edward Island, Charlottetown, Prince Edward Island

**Goals:** Raise awareness about the Brain Story within the Department of Education and the school system to create a deeper understanding of the importance of upstream efforts in preventing substance use and mental health issues later in life.

**Activities:** Having recently been seconded from the Department of Health to the Department of Education, Shauna first targeted her supervisor and colleagues on the Student Well-being Team. She pitched the Brain Story as an opportunity to create a shared language and understanding about the root causes of addiction and mental health problems throughout the education system, and use the knowledge as a framework to guide prevention approaches shared throughout the system. Unfortunately, her request to prioritize this approach as a value-add to the Student Well-being Team was not successful.

### Shauna's meetings and presentations

- Early Childhood Development Association
- Women's Network PEI
- Directors and managers, mental health and addiction, Department of Health
- Staff from English and French school boards
- Non-profit organizations
- Provincial epidemiologist and leads for public health and opioid response
- Provincial directors of child and family services
- Provincial directors of corrections

Shauna then decided to change course and spread the knowledge wherever she could find an opportunity. She capitalized on relationships she had established in the Department of Health and new relationships developed through the Student Well-being Team. Through these relationships she shared Brain Story science across a number of sectors, focusing on its relevance to public health and education systems, with the goal of creating additional champions for the work.

**Outcomes and Impact:** There was considerable interest in Brain Story science among Shauna's networks, and although no clear champions emerged at that time, some of the seeds she planted have since come to fruition. For example, uptake of the Brain Story resources has steadily grown across the province, including in a newly formed [PEI Alliance for Mental Well-Being](#), suggesting that some of the early conversations Shauna had with her networks ultimately got traction.

Shauna is now pursuing a doctorate in psychology and is no longer positioned to follow up on her efforts.

## Project Team and Location

**Cathy Lethbridge**, Central Principal of Well-being, Simcoe County District School Board (SCDSB), Midhurst, Ontario

**Goals:** Provide staff and the public with a better understanding of adverse childhood experiences and their effects in classroom settings, and help develop trauma-informed teaching practices that allow all students to thrive.

**Activities:** Cathy recognized that she and her team did not have the peoplepower to provide dedicated training to the thousands of staff within the school board, nor could she mandate what topics additional training would focus on. Her strategy instead was to align with SCDSB's existing goal of developing a trauma-informed workforce and promote the BSCC as a key resource to help build this capacity. She added information and links to the BSCC on the board's website, and pitched



the value of the BSCC to mental health staff, child and youth workers, and educational assistants in SCDSB, as well as staff involved in a pilot project that provides specialized supports to students with high adverse childhood experience scores. The superintendent also agreed to encourage educational assistants to complete the course on their regularly scheduled professional development days so they could do it on paid time. The changed workloads created by the pandemic provided additional opportunity for many staff to enroll in the BSCC.

In addition, Cathy provides professional development about trauma-informed practice as part of her regular work and was able to weave in some of the Brain Story concepts and language and introduce the Brain Architecture Game.

**Outcomes and impact:** Brain Story concepts, in combination with other training that many staff within SCDSB have already completed (e.g., the [Shanker Self-Reg® Framework](#)), are helping staff develop a deeper understanding of the relevance of brain development and how it might apply in the classroom. Cathy has heard anecdotally that some staff have enrolled in the course but has not yet been able to confirm enrolment or evaluate any impacts of the course.

## Project Team and Location

Karen James, Registered Psychotherapist and Addictions Counsellor, Rideauwood Addiction and Family Services, Ottawa, Ontario

**Goals:** Increase awareness among professionals in the health and justice systems of the root causes of addiction to promote recovery and healing instead of symptom reduction, and reduce the stigma surrounding these issues.

**Activities:** Karen developed a presentation that combined Brain Story concepts with real-world examples of addiction and treatment strategies. She also built-in information about the BSCC as a resource for gaining additional skills and confidence in using the science in practice. She delivered her presentation to her executive director and colleagues and there was considerable interest and buy-in to use the BSCC as a staff training tool. When the pandemic hit, she encouraged staff with reduced workloads to use that time to complete the course.

Karen also worked in Ottawa's drug court and delivered the presentation to Crown attorneys. Her presentation resonated deeply with this group as it clearly linked an established, scientific evidence base with lived experience. She also delivered the presentation to Crown attorneys in Toronto and was invited to present again via webinar later. Since this time, Karen has done several presentations for Ontario's Human Services and Justice Coordinating Committee network.

Finally, Karen used her relationships in the community to solicit interest in Brain Story science. For example, she presented to a second-year undergraduate medicine class at the University of Ottawa, and has frequently brought up Brain Story science and the BSCC during her community work.

Karen changed positions during the BBL and now works at a mental health clinic in Kingston, Ontario. She has provided her presentation to her colleagues and wrote a related [blog for the clinic website](#).

**Outcomes and impact:** Within her own practice, Karen now incorporates Brain Story science in key ways. She uses the Adverse Childhood Experiences Questionnaire with her clients and pairs it with a focus on building resilience as a treatment goal. She also shares Brain Story concepts directly with clients and has found that this decreases the shame and self-blame that can get in the way of engaging with a treatment program. She has noted that her clients are more willing to engage in their recovery, which is helping to improve outcomes. One of the programs at the drug court has also started using the Adverse Childhood Experiences Questionnaire with clients.



## Lessons Learned and Next Steps

### **Leadership buy-in is critical to supporting change: secure it early, preferably before you start.**

Engaging in practice, program, organization or system change is complex work. Gaining leadership support for a new approach is a foundation for any change project's success. Such support provides organizational endorsement for staff to change how they work, supports new programming and policies that help embed the change organizationally, and can authorize the deployment of resources required to support the change. If you cannot secure support, the work will likely not proceed or will be slowed or hampered by competing priorities.

One way to cultivate support from leaders is to align with a strategic direction they are already moving in. If you can clearly articulate that alignment, there is a greater chance that leaders will be interested in and prioritize the work. You might need to wait for a window of opportunity as timing or competing priorities can influence leadership support even if the subject matter is relevant.

**Capitalize on relationships.** Many Brain Builders had existing relationships to draw on to support their project goals. From securing agreement for backbone support for an Ontario Brain Story strategy, to getting information in front of busy Crown attorneys, to awareness-raising in a small jurisdiction like Prince Edward Island, leveraging relationships was a significant component of the success these Brain Builders were able to achieve. In some cases, this success was borne out much further down the line, showing that networking pays off in ways that may be slow at first but can build.

All the projects in this case study were undertaken by individuals, which may have hampered their success compared to the pairs and teams undertaking some of the other BBL projects. Approaching this kind of complex work with a team or swiftly recruiting additional champions might prevent some of the pitfalls of trying to “go it alone” and add a layer of support when challenges arise.

**Be nimble and opportunistic.** While many Brain Builders encountered specific challenges that set their project back, all were able to re-strategize and create new goals to pursue. That might have meant engaging a new organization because of a job change, or refocusing on smaller, more achievable goals when the larger goal was likely not attainable, or capitalizing on unanticipated opportunities. Whatever the case, each Brain Builder was able to pivot and work within the context they found themselves and achieve a significant amount of success.

**Build a culture of continuous evaluation.** Many Brain Builders struggled with the evaluation component of the BBL, either because it was unfamiliar or because they had competing priorities that did not allow them time to develop an evaluation plan and monitor outcomes. As a result, some important shifts were not captured, leaving the Brain Builders unable to articulate the impact of their knowledge mobilization efforts. Any change process must be evaluated to understand if the change is producing the desired effect. Having this information helps build support for the work and can inspire next steps.

All the Brain Builders profiled in this case study remain strong champions of the Brain Story. They continue to act as ambassadors for brain science and its use to support cross-sectoral work and, ultimately, create better outcomes for individuals, children and families in Canada.

