



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.

Nova Scotia Early Childhood Development Intervention Services

Brain Builders Lab Case Study

Project Team

- Camille Magsambol, Developmental Interventionist (at the time of the BBL), Nova Scotia Early Childhood Development Intervention Services

Location

- Nova Scotia

Introduction and Project Goals

Nova Scotia Early Childhood Development Intervention Services (NSECDIS) serves children with developmental delays or diagnoses from birth to school entry, and their families. The organization has 30 sites across the province, where developmental interventionists (DIs) provide services ranging from developmental screenings to case coordination and transition support. They work directly with families and in consultation and collaboration with other health service providers, childcare professionals and preschool staff.

Working as a DI in a rural community with many Indigenous children and families, Camille Magsambol recognized that intergenerational trauma was a key contributor to the difficulties her clients faced. After the Alberta Family Wellness Initiative's Brain Story Certification Course (BSCC) helped her better understand her clients and how to support them, she joined the Brain Builders Lab to:

- To build the knowledge and skills of NSECDIS staff in Brain Story science;
- To shift current practices within NSECDIS to a more trauma-informed approach; and
- To improve outcomes for families seeking services at NSECDIS.



Knowledge Mobilization Activities

Raising awareness among leadership: Just as Camille was embarking on her project, NSECDIS was in the process of launching mandatory training guidelines and programs for all staff. She met with her regional director to pitch the BSCC as a training tool for staff and framework for future professional development. She got leadership buy-in very quickly.

Hands-on learning and discussion with staff: Getting leadership buy-in so quickly meant Camille did not have to look for additional opportunities to pitch the course as a staff training tool and she could move directly to the more challenging issue of applying the science in practice. Once staff had completed the BSCC, the Brain Architecture Game was introduced at regional meetings across the province, along with role-playing activities and discussions about how the science could be applied in practice. This helped deepen the staff's understanding of the science and engaged them in a collaborative process to generate ideas for how it could be used on the ground. It also gave them a common language to use with families and with each other.

Outcomes and Impact

Organizational change: Within a month of pitching the BSCC to leadership as a training tool, NSECDIS' guidelines were adjusted not only to include the BSCC as mandatory training, but also as the resource that needed to be completed first. Including the BSCC as part of mandatory staff training has shifted programs and practices within NSECDIS. For example, the organization has a policy that if staff cannot reach a family within a certain number of attempts, the family is discharged from services and would require a re-referral. While the policy itself has not formally changed, DIs now have much more flexibility to re-engage these families, build relationships, form a fuller picture of their needs, and make more concerted efforts to keep them involved in services in meaningful ways. As a result, there are fewer families on staff caseloads who are considered hard to reach.

Program and practice change: DIs now frequently share Brain Story concepts directly with families to help them better understand their challenges and resilience. There is also a greater emphasis on the importance of building relationships with families rather than simply providing a moment-in-time intervention. Camille and many other DI staff have reported shifts in practice that help build that relationship. These shifts align with a more trauma-informed approach, such as having more patience with challenging families, asking more questions, giving them more time to talk, truly meeting families where they are and listening more. This approach has helped identify unmet needs that may never have come to light without it and is also affecting referral practices.

Shifting mental models: Staff have reported shifts in attitudes and beliefs about clients, decreasing their judgment and the stigma surrounding the problems many families face. Staff are also reporting shifts in their understanding of their own role in the sector. Instead of focusing on fixing problems, answering questions and responding to immediate needs, conversations are now focused on why problems exist in the first place. The goal is not just to fix a problem but to build parent and caregiver capacity to support their child so they no longer require services. This re-focusing of the DI role is helping to support shifts within NSECDIS from a deficit-based model to a more strengths-based, resilience-focused model of service delivery.

New partnerships: Through the Brain Builders Lab, Camille connected with another Nova Scotia-based Brain Builder team from the IWK Health Centre in Halifax. She plans to leverage their expertise in trauma-informed practice to help develop additional educational opportunities for NSECDIS staff. They plan to remain connected to share strategies on applying Brain Story science in different contexts.



Lessons Learned and Next Steps

Align with existing organizational goals and values: Camille’s biggest success was the speed at which she was able to produce program- and organizational-level change. NSECDIS was already looking for high-quality training opportunities for staff and the BSCC was a perfect fit. It was relevant to the work, easily accessible, fit with the organization’s culture and values, and was expected at the leadership level to add value to the work of NSECDIS.

Capitalize on relationships: The opportunity to connect with other Brain Builders from Nova Scotia was extremely valuable. Camille was able to leverage these relationships into a new partnership between NSECDIS and IWK Health Centre that stands to benefit both organizations.

Institutionalizing the knowledge and providing sense-making opportunities is key. Camille reflected that NSECDIS’ requirement that staff take the BSCC was necessary to ensure the knowledge became deeply embedded in the organization. In addition, providing follow up sense-making opportunities was critical to help staff operationalize brain science at the program and individual practice level. It will take continued efforts to convince all staff of the value of aligning practices with the science, but as these new practices become standard within NSECDIS, it will help bring everyone on board.

The Brain Story Certification continues to be a crucial part of NSECDIS’s orientation process. A learning and development specialist added to the provincial team now supports reflective practice and discussion of the Brain Story. Camille plans to continue to find ways to embed the science at the organizational level, including through participation on a language and cultural working group and a new high-risk infant focused project. The language and culture group reviews and revises policies, forms and screening tools using a culturally sensitive lens. The high-risk infant pilot project aims to make connections with socially complex and diverse families to help build parent capacity and comfort with provincial services. She is also hopeful that as the science continues to be applied in each region and spreads further, it will help standardize service delivery across all NSECDIS sites.

Resources

- CCSA impact video: [Early Childhood Development in Nova Scotia](#)

