

# Steps

## ECMap Newsletter

Early Child Development Mapping Project

January 2015 - Final Issue

# Making children's early development everyone's business

The conversations in Alberta about early childhood development have been changed.

As citizens, we now know that we have work to do to improve the support we all provide to the healthy development of our babies, toddlers and young children. We can no longer ignore the state of early development of Alberta's preschool children and the huge inequities that exist across the province. ECMap has been able to document what early childhood educators have known for a long time — many Alberta children are not developing fully during their preschool years.

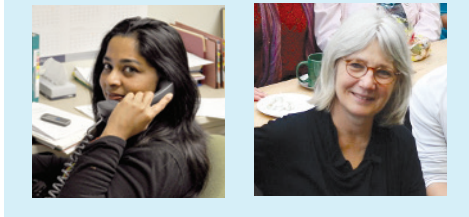
Now conversations include community members of all backgrounds. No longer is the discussion the realm of only those who are professionals employed in the early childhood field or government officials assigned the tasks. The data is transparent. All citizens have access to the profile of early childhood development for not only their own community but also of other communities in the province. Community coalitions made up of many different community members are reaching out to all citizens to find better ways to support their children's early development.

As the ECMap project comes to a close, the work of trying to improve early childhood development in the province will continue. Local meetings, discussions and action planning will be ongoing as communities continue to embrace the notion that citizens have the opportunity and responsibility to contribute to the well-being of the very youngest members of our society. We are the villages that raise the children.



Photo: Fahim Hassan

(Above) Sue Lynch, ECMap director; (left) Corrine D'Souza, project administrator and 'right-hand woman'; Olenka Melnyk, communications coordinator



You can access community results and our LiveAtlas at our website [www.ecmap.ca](http://www.ecmap.ca).

It's been a privilege to be part of this initiative and work on behalf of Alberta's young children with all of you.

*Susan Lynch*

Dr. Susan Lynch, ECMap director

## In this issue

<i>Animating research data with user-friendly technology</i>	2
<i>Inspiring communities to take action</i>	3
<i>Data raises more questions</i>	4
<i>Contact information</i>	4

# Mapping and data

## Animating research data with user-friendly technology

They call themselves the MAD team.

The acronym aptly captures the drive and enthusiasm of EMap's mapping and data team.

During the course of the EMap Project, the MAD team has been responsible for crunching EDI (Early Development Instrument) data on more than 70,200 children into Alberta baseline results. The team created thousands of colourful maps, charts and graphs to make the results readily comprehensible. It also developed the interactive *LiveAtlas* that allows users to situate themselves in the community where they live and access a wealth of early development-related data with a click of the mouse.

In carrying out these tasks, the team has had to manage a huge database of more than 70,200 questionnaires, each with 103 questions, plus demographic information on all the children in the study, socio-economic status data and information on thousands of community resources. The team has also had to keep up with a technology that has evolved so rapidly in the past five years that the hard-copy atlas of early childhood development in Alberta originally planned ended up being scrapped as an anachronism.

"The technology has changed remarkably from the time when we first began investigating how to best help communities look at their data," says Cindy Post, manager of the MAD team. "GIS (geographic information system) technology has become pervasive with the widespread use of the GPS and the advent of smartphones and iPads. We decided to leverage the technology to put the data on the ground."

This made sense given EMap's dual mandate as a research and community development project. Social mapping was adopted right from the start as a useful tool to communicate population-based data



The MAD team has a strong international component that has included staff members from China, Bangladesh, Mexico, India and Ukraine. Left to right (front row) Mauricio Yamanaka; Cindy Post, MAD manager; Darcy Reynard; (back row) Gregory Chao, Xian Wang and Fahim Hassan

about children's development to communities. Going digital was a logical next step, given the sheer amount of data on the EDI, socio-economic status and local resources that was being collected and analyzed for 100 communities and 300 subcommunities in the province.

Translating the data into appealing, easy-to-understand maps and other visuals involved a trial-and-error process for the team and close collaboration with EMap's community development team and communications coordinator. Preliminary results for communities were released in print format using a template developed by the whole project team.

While coalitions and community members learned how to read and interpret their preliminary data, the MAD team honed its

web mapping and software coding skills and work began on the digital *LiveAtlas*. Post is particularly proud of her team's success in partnering with the community development team to encourage and train coalitions to gather information about their community resources. A participatory mapping tool was created for this purpose and within a three-month period 98 coalitions identified and mapped a total of 23,100 resources in their communities.

In October, the *LiveAtlas* was completed and launched, providing communities with a sophisticated, powerful tool to gauge their young children's development, explore the potential impact of socio-economics and community resources on their development and compare data across the province.

*Continued on Page 4*

# Community development & mobilization

## Inspiring communities to take action

How do you report results for early development at the community level in a province where there are no commonly accepted local boundaries? And how do you build community coalitions to focus on early childhood development?

That's the big challenge the community development and mobilization team faced when it got off the ground.

What initially appeared to be a huge obstacle turned out to be an unexpected advantage, says team manager Line Perron.

Her team asked communities for their help in dealing with the dilemma. The response was phenomenal. Hundreds of people from all walks of life came together across Alberta to identify their communities and map their own boundaries. Within a year, 100 'early childhood development' (ECD) communities were established, covering the entire province and coalitions were organized in every community.

"The fact that communities had to define themselves and generate their own boundaries resulted in more diverse participation and more buy-in for the project" says Perron. "When the first community research results were reported, people felt that they owned their data. This has not always been the case elsewhere in Canada,

where projects have struggled to get communities to respond to their results."

Perron's "dream team" is made up of 10 coordinators assigned to 10 zones, ranging from sprawling rural areas to the highly populated urban areas centred around Calgary and Edmonton. Many coordinators logged 50,000 kilometers on the road every year, driving anywhere from 1.5 to 4.5 hours to attend coalition meetings. Perron drew from a wide pool of expertise in putting together the team, which has included early learning post-secondary program instructors, teachers, home visitation and public health workers and social workers.

Coordinators took a "flex" approach in mobilizing communities, responding to their unique and diverse characteristics and needs. "They had to lead from behind and serve as rudders providing direction and support rather than steering the ship," says Perron.

The key to effective, sustainable community development, as any community developer worth her salt knows, is the ability to inspire and motivate people to act on their own behalf — or in this case on behalf of their young children.

"Regardless of the political or economic landscape, communities will not lose sight of the

ECD agenda," says Perron. "The need to pay attention to young children will not go away."

The last word goes to community coalitions, themselves. Here are some of their thoughts on the past five years of ECD initiative work:

"The value of the work we've been doing together around early childhood development lies in how communities have come together to discuss EDI results and possible solutions. The EMap Project has served as an impetus for community members to take ownership of their results, as well as the actions they have identified to bring change."

- Iris Spurrell, coordinator, Bowness Montgomery Early Childhood Coalition, Calgary

"Your research, leadership, regional coordination and spirit of partnership ignited a passion in our community. We have been challenged to partner together as a community to respond to the needs of our young children. We are excited to continue this journey in supporting our children to reach their potential."

- Melody Ulmer, co-chairperson, Communities for Children Coalition, Barrhead - Fort Assiniboine



Community development and mobilization team members (left to right) Tinna Ezekiel; Kathy Crothers; Janice Kraemer; Donna Cushman; Line Perron, manager; Valary Howard; LaVonne Rideout; Launa Clark; Laurie Lafortune; and Holly Handfield

# Research

## Data raises more questions

### No data, no problem, no action.

Researchers often recite this truism to point out the value of research information in identifying issues and galvanizing action.

Many Albertans were surprised by EDI results which showed that nearly 29 per cent of young children in this province are struggling in one or more areas of development. In a number of communities, the rate is more than 50 per cent.

Many young children in Alberta are consistently falling below the Canadian norm. The Canadian norm itself, which shows more than 25 per cent of young children struggling, is hardly something to aspire to.

“We should not be seeing results like this in Canada,” says EMap’s research scientist Dr. Vijaya Krishnan. Children’s early development is an important predictor of their future well-being and a society’s well-being, she notes.

As senior researcher with the project, Krishnan created a socio-economic index (SEI) to measure the socio-economic status of communities. In developing the index, she looked far beyond income levels. She also included such things as income disparity,



Dr. Vijaya Krishnan is EMap’s research scientist.

unpaid child care and the repair state of homes, using 26 Statistics Canada variables that are linked to socio-economic status. The variables were grouped into five factors. Scores were then calculated for each of the five factors at the community level to provide a more in-depth, nuanced look at how local socio-economic conditions might be impacting early childhood development (ECD) outcomes.

The results indicate a high correlation between

socio-economic status and ECD results in Alberta, confirming research elsewhere.

Krishnan has also tested the reliability of the Early Development Instrument (EDI), the tool used to measure the development of populations of kindergarten-aged children. She concluded that the tool needs fine-tuning. The EDI would be easier to fill out and analyze, but just as valid, if the 103-item questionnaire was cut down to 59 essential items, she says. Her findings were recently published in a paper co-authored with Amin Mousavi, a doctoral student at the U of A (<http://link.springer.com/article/10.1007/s11205-014-0711-x>).

Krishnan explored the cultural appropriateness of the EDI as part of the First Nation Child Development Project and the Multicultural Early Child Development Project. She hopes to see this research continue. Data is only as valid as the tool that is used to measure it, she notes. EMap research findings have also raised many questions that invite further investigation.

“The research data provides a snapshot of how our children are doing and guidelines for responsive action. People need to see the data, use it and question it,” Krishnan says.

### Continued from Page 2

Through its project work, conference presentations and involvement with professional organizations, the MAD team has raised the profile of social mapping, especially in Alberta where GIS technology is often focussed on natural resources, such as oil and gas, says Post.

By shifting attention to Alberta’s other great natural resource, namely our young children, the team has put invaluable data into the hands of communities that can influence policies and help affect change.

“How great is that?” says Post.

### Contact information

EMap’s LiveAtlas, materials and resources and other information can still be accessed at our website [www.ecmap.ca](http://www.ecmap.ca). The website will not be updated, however.

The Early Child Development Mapping Project (EMap) was part of the Early Child Development Mapping Initiative, funded by Alberta Education. EMap was led by the Community-University Partnership for the Study of Children, Youth and Families (CUP) at the Faculty of Extension, University of Alberta.

For further information about the ECD Mapping Initiative, Early Development Instrument (EDI) and community coalitions, please contact:

Sandra Shepitka-Boyle,  
Senior Education Manager  
Learner Services Branch, 8th Floor,  
44 Capital Boulevard  
10044 – 108 Street, Edmonton AB T5J 5E6  
[sandra.shepitka-boyle@gov.ab.ca](mailto:sandra.shepitka-boyle@gov.ab.ca)  
Tel: 780-427-4159  
Fax: 780-643-1188

\*\*\*

Download EMap’s final report (*How are our young children doing? Final report of the Early Child Development Mapping Project (EMap)*) and its recommendations at [https://www.ecmap.ca/ECMAP%20Reports/ECMap Final Report 20141118.pdf](https://www.ecmap.ca/ECMAP%20Reports/ECMap%20Final%20Report%2020141118.pdf).

**Mapping a bright future for Alberta’s young children**