

Early Development Indicator (EDI) 2006 NIAGARA RESULTS

Speech Services Niagara
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Tiffany Gartner

Data Analysis Coordinator
Ontario Early Years Niagara Region,
Niagara Region Public Health Department

Marion Trent-Kratz

Researcher
Understanding the Early
Years (UEY), ECCDC

Glory Ressler

Coordinator
Understanding the Early
Years (UEY), ECCDC



early childhood community development centre

Understanding the Early Years



The Understanding the Early Years initiative is funded by Human Resources and Social Development Canada. For further information, visit www.hrsdc.gc.ca.

AGENDA

- Overview of UEY and DAC
- The Early Development Instrument
- Local EDI Results
- Discussion
- Evaluations

- # UNDERSTANDING THE EARLY YEARS (UEY)
- Funder: HRSDC (sites across Canada)
 - Sponsor: ECCDC
 - Community Coalition: Early Years Niagara
 - Advisory Group: EYNRAG
 - Partners: RMN (Children's Services, Public Health, DAC), OEYC's, DSBN, NCDSB, various early years service providers, community groups, and clubs
 - History: Niagara Falls in 2001, Niagara Region in late 2005

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KEY DELIVERABLES

- Promote awareness and understanding concerning the importance of the early years
- Examine the relationship between community factors and early learning and development outcomes in Niagara
- Report on local and national findings
- Support evidence-based decision making and planning in the community (capacity building)

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- # UEY KNOWLEDGE-GATHERING TOOLS
- CHILD DEVELOPMENT, FAMILY & COMMUNITY EXPERIENCE**

Readiness to learn (EDI)

Parent Interviews & Direct Assessments (NLSCY, PIDACS)
- COMMUNITY ASSETS**

Community Resource Inventory Survey
- COMMUNITY FACTORS**

Socioeconomic Conditions and Social Risk Index (Census)
- UEY Timeline**

 - 2001 EDI – UEY Niagara Falls
 - 2002 National Longitudinal Study of Children & Youth (NLSCY)
 - 2001 Census/Statistics Canada - UEY Niagara Falls, UEY Niagara Region
 - 2002 EDI – UEY Niagara Falls/Ontario Early Years Niagara Region
 - 2003 EDI – UEY Niagara Falls
 - 2003 Community Resources Inventory Survey – Ontario Early Years Niagara Region/UEY Niagara Falls
 - 2005 EDI - UEY Niagara Falls/Ontario Early Years Niagara Region
 - 2005 NLSCY – UEY Niagara Falls
 - 2006 EDI – UEY Niagara Region
 - 2007 Community Resources Inventory Survey – UEY Niagara Region
 - 2007 PIDACS – UEY Niagara Region

UEY Timeline

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- 2007 PIDACS – UEY Niagara Region

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KEY PRODUCTS

- Maps & Mapping Studies, EDI Reports, Community Studies
- Community Updates, School Board Reports, Parent Brochures
- Research Communiques, Articles, Specific Requested Reports
- Custom Presentations, Workshops, Community Forums, Conference Workshops, and Event Displays

- ## KEY IMPACTS TO DATE
- Identification of professional development, regional and neighbourhood needs
 - Program and service delivery planning
 - Resource allocation decision-making
 - Proposal, grant, and report writing
 - Research, event and product development partnerships
 - Media coverage and community action
 - Purchase of resources and sponsorship of events, activities and training
 - Local and national knowledge enhancement

KEY NEXT STEPS

- Community Brief (on additional analysis of 2006 EDI) and ongoing presentations
- Website Launch
- Community Mapping Study (EDI and socioeconomic variables)
- Community Study (analysis of 2007 parent interviews and direct assessment of SK children)
- Community Forum (November 2007)
- Community Action Planning Meetings and Plan

DATA ANALYSIS COORDINATOR

(DAC position)

- Funded by MCYS and housed at Niagara Regional Public Health Department
- Healthy, safe, productive communities by promoting and supporting Early Years strategies
- Gather & disseminate research, information, and statistics on children 0-6 in the Niagara Region
- Support Early Years in program planning & evaluation
- Assess community needs and capacity (Early Years)
- Work with programs to support development of new instruments and systems
- Ensure local implementation of the EDI
- Act as a technical liaison for Ontario Early Years Centre staff and EYSIS database creator

NOTES

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EARLY YEARS NIAGARA

- “Early Years” = nationwide initiative
- 4 Ontario Early Years Centres
- Niagara Children’s Charter
- Literacy initiatives
- BEC and other community links

- ## BEST START
- Federal/Provincial/Municipal initiative
 - Assist parents to help their children be successful in school
 - Expand licensed child care spaces
 - Introduce innovative approaches to healthy child development and early learning
 - Bring together community services
 - Emphasis on local neighbourhoods

MAJOR UPCOMING PROJECTS

- 2007/08 Niagara's Best Start Community Integrated Plan
- 2008 Community Report at neighbourhood level
- 2008 EDI & Kindergarten Parent Survey (KPS)
- UEY Forum (2007)

EARLY DEVELOPMENT INSTRUMENT (EDI)

Provides an important part of the picture for the community, as well as early years service providers and decision-makers.

- Population-based measure
- Developmentally grounded
- Links to community factors, literacy and school curriculum
- Best used in conjunction with other information

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EARLY DEVELOPMENT INSTRUMENT (EDI)

Measures '*readiness to learn at school*' - refers to children's ability to meet task demands, such as:

- Being comfortable exploring and asking questions,
- Listening to the teacher,
- Playing and working with other children,
- Remembering and following rules, and
- Benefiting from the educational activities provided.

EARLY DEVELOPMENT INSTRUMENT (EDI)

Teacher-recorded measure on *five domains* of early child development:

- Physical Health & Well-being,
- Social Competence,
- Emotional Maturity,
- Language & Cognitive Development, and
- Communication Skills & General Knowledge.

EDI SUB-DOMAINS

Physical Health and Well-being

- Physical readiness for school day
- Physical independence
- Gross and fine motor skills

Social Competence

- Overall social competence
- Responsibility and respect
- Approaches to learning
- Readiness to explore new things

Emotional Maturity

- Pro-social and helping behaviour
- Anxious and fearful behaviour
- Aggressive behaviour
- Hyperactivity and inattention

EDI SUB-DOMAINS

Language and Cognitive Development

- Basic numeracy and literacy
- Interest in literacy, numeracy, and memory
- Advanced literacy

Communication Skills and General Knowledge

- Communicates easily and effectively using English
- Ability to participate in storytelling or imaginative play
- Ability to articulate clearly
- Showing adequate general knowledge and proficiency in their native languages

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 Toronto

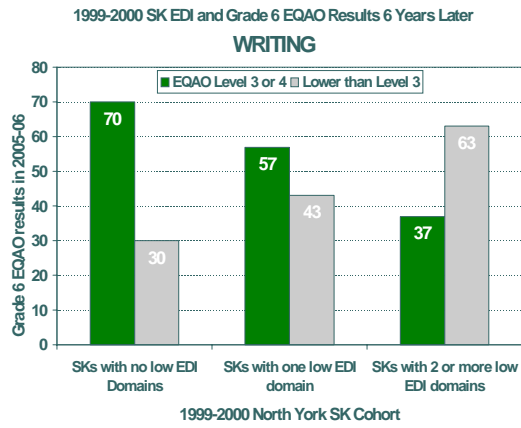
-
- Halton**

- Further analyses conducted by Dr. Magdalena Janus (co-creator of the EDI) at the Offord Centre for Child Studies, McMaster University, has shown that there are correlations between the EDI and Grade 3 EQAO scores as well. For additional information visit <http://www.offordcentre.com/readiness/>.

The data is also organized by SK scores with no, one, and two or more low EDI domains. The 'SKs with 2 or more low EDI domains' appears to be a strong predictor of grade 6 EQAO reading performance.

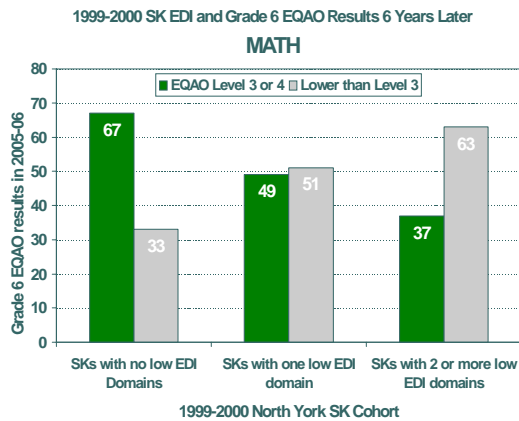
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Source: Toronto District School Board, March 2007

Again, this graph shows that low on 2 or more EDI domains is a strong predictor of EQAO writing performance.



Source: Toronto District School Board, March 2007

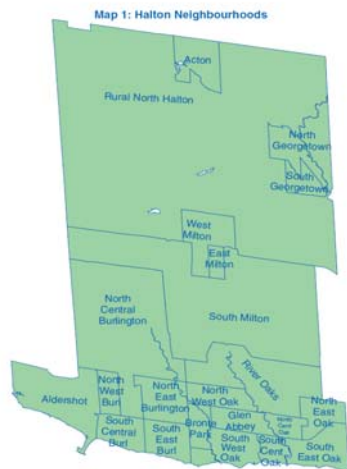
Again, this graph shows that low on 2 or more EDI domains is a strong predictor of EQAO math performance.

Halton is comprised of both urban and rural, specifically: Milton, Burlington, Oakville, Acton, Georgetown.

Keep your eye on the neighbourhoods of: Acton, North Georgetown, East Milton and South Central Oakville. Look for patterns and/or similarities.

Halton

- Milton
- Burlington
- Oakville
- Acton
- Georgetown





The flags mark the neighbourhoods with the highest participation percentages and also represent where hubs are located (South Georgetown, East Milton, South Central Oakville, South Central Burlington and Aldershot). These neighbourhoods consistently scored at the high end among the different variables.



- **Niagara Falls - 2001, 2003 & 2005, UY**
- **Niagara Region - 2002 & 2005; UY Niagara Falls & Ontario Early Years Niagara Region, and 2006; UY Niagara Region**

What follows are some of the results...

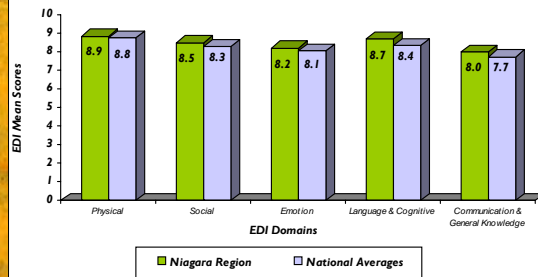
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Children in the Niagara Region scored significantly higher than the national averages on all five of the school readiness to learn domains!

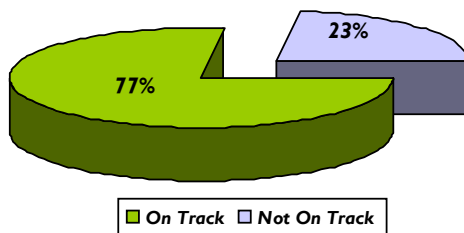
Note: 'Ready for School' is the same as 'On Track for Learning in School' as these categories are comprised of children who scored above the 25th percentile.

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Niagara Region 2006: Comparison of Children's Mean Scores and the National Average

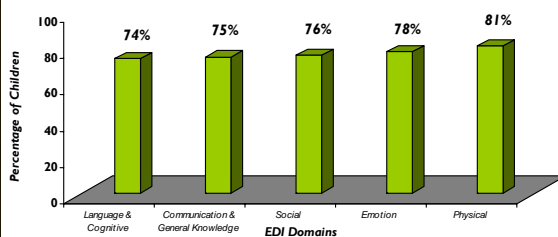


% of Children On Track and Not On Track for School



A large proportion of children in the Niagara Region are ready for school across the five domains!

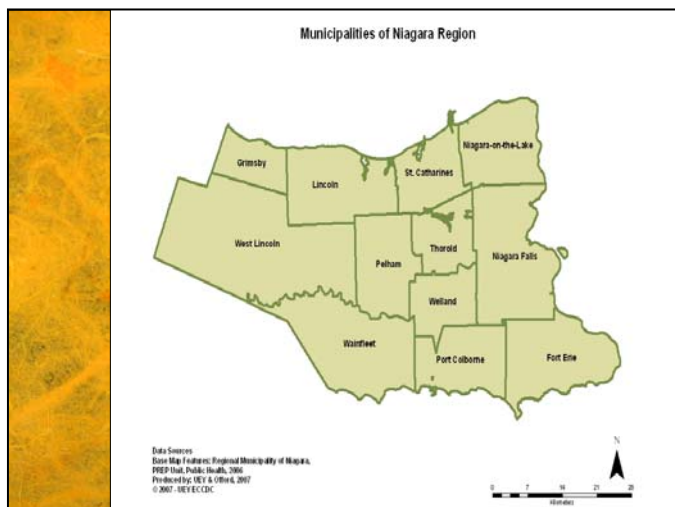
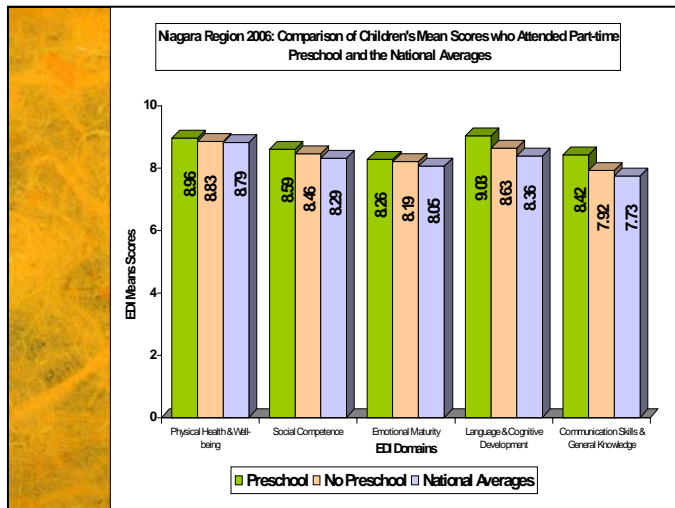
% of Children On Track for School Across the 5 Domains



On average over three-quarters of the children were ready to learn across the five domains.

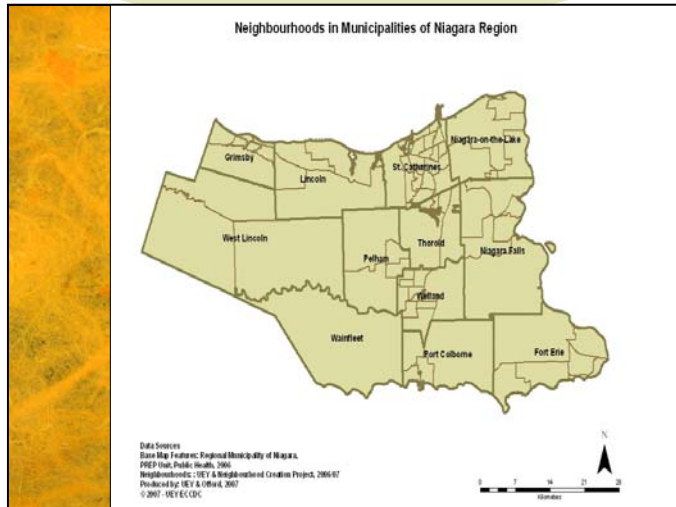
- The graph shows how children who attend part-time preschool programs have higher EDI scores than those who don't and the national averages.
- Specifically, the graph shows how children in Senior Kindergarten who attended part-time preschool had statistically significantly higher scores in Language and Cognitive Development and Communication Skills and General Knowledge.

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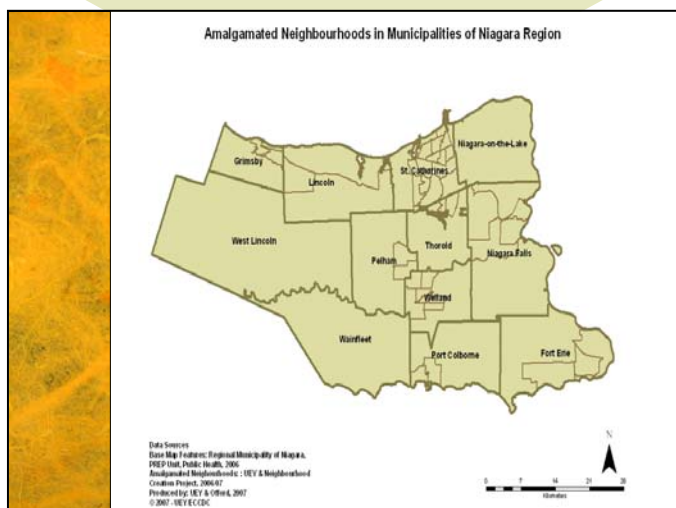
The neighbourhood boundaries outlined were identified as a result of the Neighbourhood Creation Project (Ontario Early Years Niagara Region, Niagara Region Public Health Department - 2006). The map was created by UEY (2007), in partnership with the DAC and the Offord Centre for Child Studies, McMaster University. Base features for the map were created by the PREP Unit, Public Health. The municipalities are outlined in dark green, with the neighbourhoods outlined in brown.

NOTES



Neighbourhood samples with less than 30 children cannot be reported on in order to protect confidentiality and privacy. As a result, 10 of the 12 municipalities had to have some, or all, of their neighbourhoods amalgamated in order to report on EDI data. The DAC and UEY collaborated extensively, and also consulted the Early Years Research Advisory Group, in order to identify a long-term workable solution. Neighbourhoods were amalgamated based on geographic proximity and similar socioeconomic conditions. The amalgamated neighbourhoods as outlined in this map are the result.

These maps will only be used for reporting EDI results. Maps with the original neighbourhoods will be used to report on socioeconomic conditions and community resources and their names will be included in all maps - out of respect and appreciation for the work and wisdom of the community champions who participated in the Neighbourhood Creation Project.

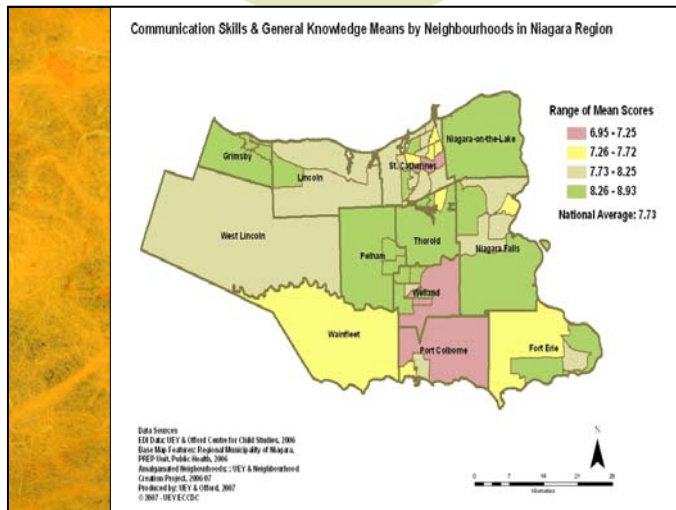


Neighbourhoods below the national average in Communication Skills & General Knowledge are found in:

- Wainfleet*
- Port Colborne*
- Western Fort Erie*
- South Eastern Welland*
- Eastern Niagara Falls*
- Northern Thorold*
- Central St. Catharines* (except eastern neighbourhood in yellow above rose area, which is not statistically significant)

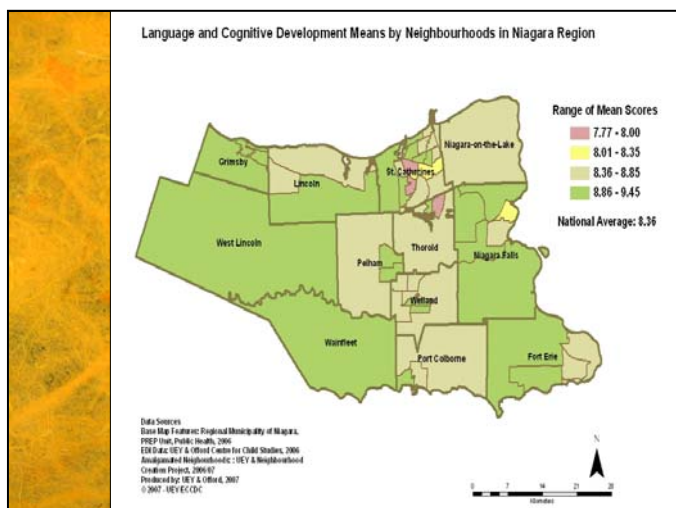
* Yellow and rose areas both statistically significantly below the national average

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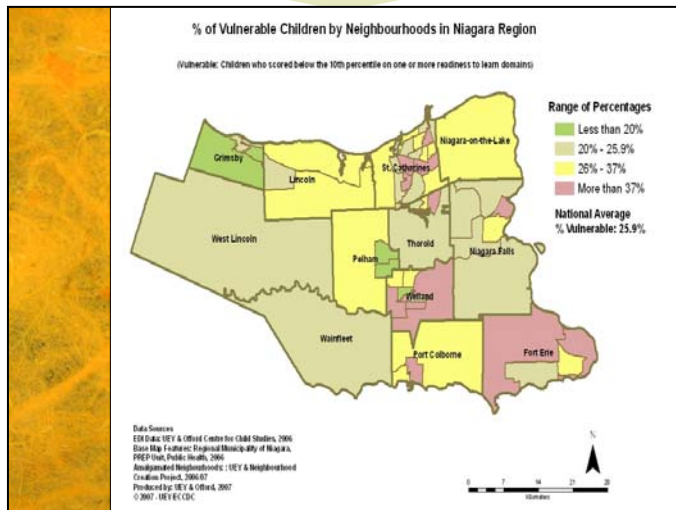
Substantial proportions of children scored at or above the national averages in Language & Cognitive Development. Neighbourhoods below were found in:

- Thorold & St. Catharines (yellow and rose areas statistically significant); and
- Niagara Falls (yellow area not statistically significant)



Vulnerability is defined as scoring low on one or more of the five EDI domains. Low scores are scores that are below the 10th percentile cut-offs relative to their peers. Yellow and rose areas are above the national vulnerability average. Children considered vulnerable may have difficulty making the transition from SK to Grade 1 and may experience challenges in learning at school.

NOTES



The following maps are on the domains of most relevance to your area of service: Communication Skills and General Knowledge and Language and Cognitive Development. Municipalities & neighbourhoods above the regional average are:

Wainfleet

Port Colborne - Stonebridge & Bethel/Gasline/ Sherkston, Sugarloaf

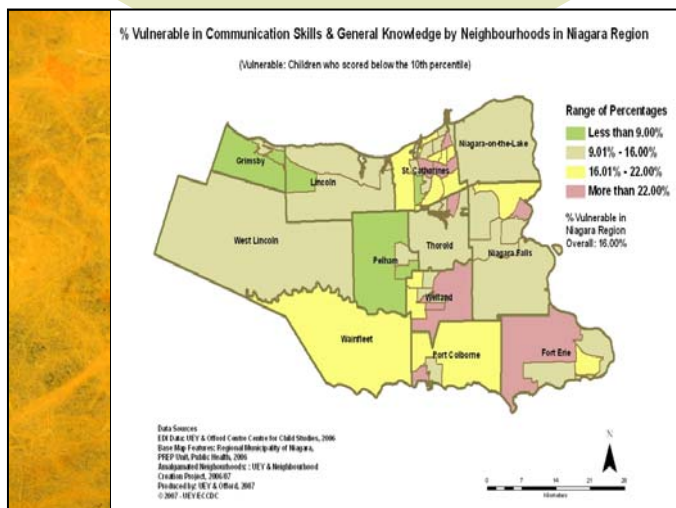
Fort Erie - Stevensville & Crystal Beach, Crescent Park & Surrounding Area

Welland - Rural Welland/Cooks Mills & Ontario Rd./Dain City, Cordage & West Main

Niagara Falls – Elgin, Stamford

Thorold - Thorold Proper

St. Catharines - Queenston & Downtown, The Haig, Carlton/ Bunting, Facer, Fairview, Grantham East, Louth, Port Dalhousie & Lakeshore, Glenridge & Brock, Merritton



Municipalities & neighbourhoods above the regional average are:

Wainfleet

Port Colborne - Three Bridges

Fort Erie - Fort Erie North & Fort Erie Lakeshore

Niagara Falls – Elgin, Drummond/Victoria

Welland - Rural Welland/Cooks Mills & Ontario Rd./Dain City

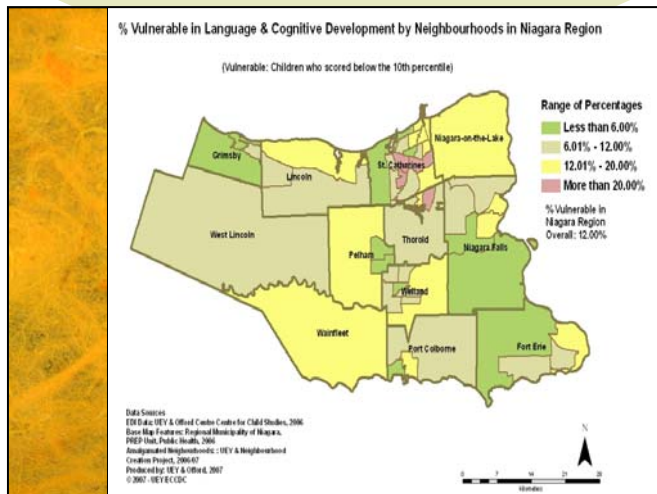
Pelham - Pelham/Effingham/Fenwick & South Pelham/Ridgeville

Niagara-on-the-Lake - Old Town, Queenston/St. Davids, Virgil & Glendale

St. Catharines - Carlton/Bunting, Grantham East, Grantham West, Merriton, Old Western Hill, Port Weller, Queenston & Downtown, The Haig

Lincoln - North Beamsville & Vineland/Jordan

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Municipalities & neighbourhoods above regional averages are:

Wainfleet

Port Colborne - Three Bridges, Sugarloaf, Stonebridge & Bethel/Gasline/Sherkston

Fort Erie - Stevensville & Crystal Beach, Fort Erie North & Fort Erie Lakeshore, Crescent Park & Surrounding Area

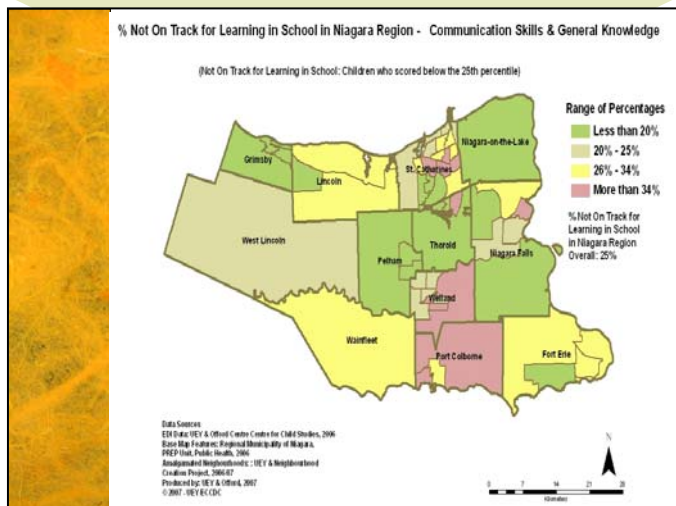
Welland - Rural Welland/Cooks Mills & Ontario Road/Dain City, Cordage & West Main

Niagara Falls – Elgin, Stamford

Thorold - Thorold Proper

St. Catharines – Fairview, Facer, Carlton/Bunting, Martindale, The Haig, Queenstown & Downtown, Grantham West, Grantham East, Merriton

Lincoln - North Beamsville & Vineland/Jordan, Campden/Tintern



Not on track for learning in school is defined as scores that are below the 25th percentile cut-offs relative to their peers. Children who comprise this group are considered to be at risk or vulnerable. The yellow & rose areas are above the regional average in Communication Skills & General Knowledge.

The yellow and rose areas are above the regional average in Language & Cognitive Development. Municipalities & neighbourhoods above regional averages:

Port Colborne - Three Bridges

Fort Erie - Crescent Park & Surrounding Area, Fort Erie North & Fort Erie Lakeshore

Welland - Rural Welland/Cooks Mills & Ontario Rd./Dain City, Eastdale & Market Square, Welland South & South Pelham, Chippawa Park Area

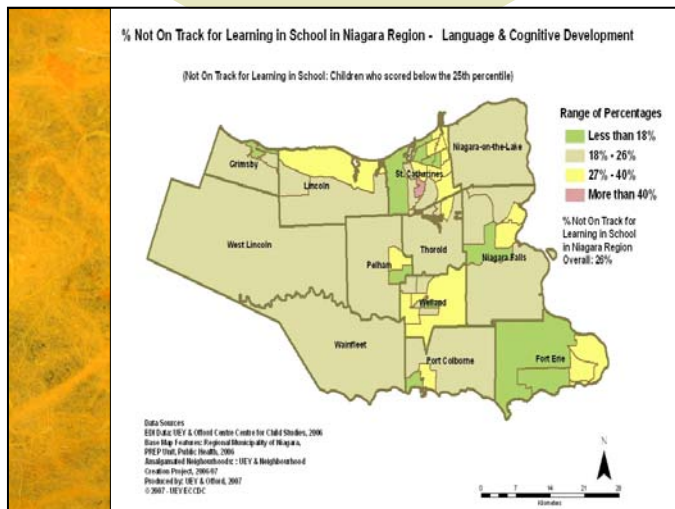
Pelham - Pelham-North Fonthill

Niagara Falls – Elgin, Drummond/Victoria

St. Catharines - The Haig, Carlton/Bunting, Grantham East, Grantham West, Port Weller, Old Western Hill, Merritton, Queenston & Downtown

Lincoln - North Beamsville & Vineland/Jordan

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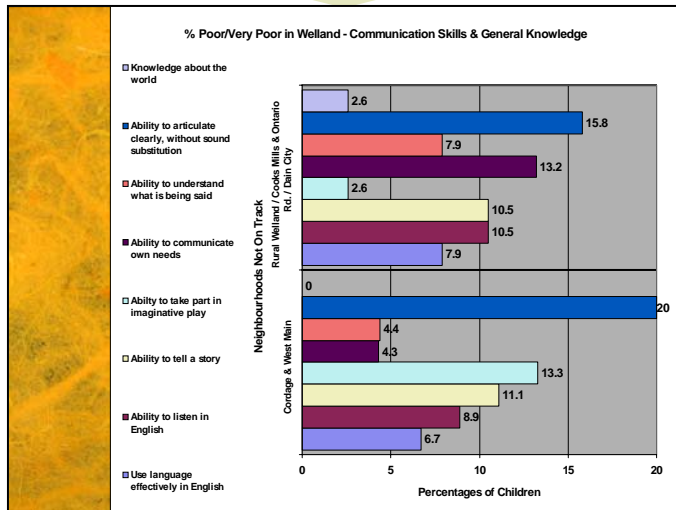
Municipalities with neighbourhoods that were above the % Not on Track regional averages in Communication Skills & General Knowledge and Language & Cognitive Development are areas that we will examine closer, as these neighbourhoods are comprised of higher percentages of children who are considered to be at risk and vulnerable overall. Welland is an example of a municipality with neighbourhoods where children live in areas that can be considered to be in highest need. The graph identifies the areas of challenge that some children from these neighbourhoods may be having in Communication Skills & General Knowledge. The bars on the graph show the percentages of children who scored poor/very poor on the items that comprise the Communication Skills & General Knowledge domain.

It would seem that children in Rural Welland/Cooks Mills & Ontario Rd./Dain City had high percentages of children who scored poor/very poor on their ability to articulate clearly without sound substitution, their ability to communicate their needs, their ability to tell a story, and their ability to listen in English.

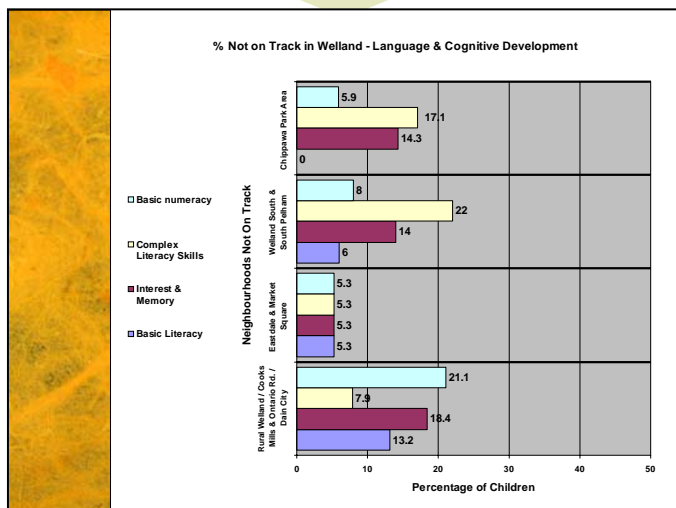
Cordage & West Main had high percentages of children who scored poor/very poor on their ability to articulate clearly without sound substitution, their ability to take part in imaginative play, and ability to tell a story.

We will review one example of graphs and maps from a municipality to assist you in working with the additional municipalities highlighted in a handout provided for your planning purposes. PLEASE NOTE: EDI results from samples with less than 30 children cannot be reported on in order to protect confidentiality and privacy. As a result, some neighbourhoods have been amalgamated in these charts.

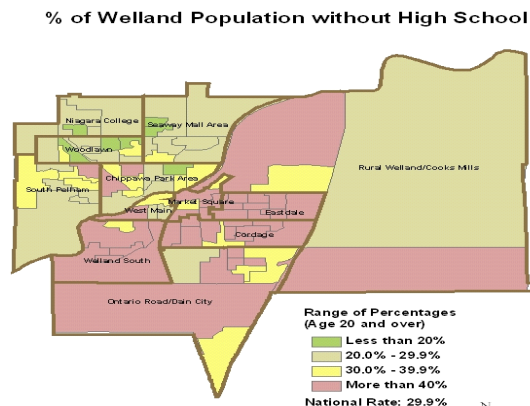
NOTES



The graph identifies the areas of challenge that some children from these neighbourhoods in Welland may be having in Language & Cognitive Development. The bars on the graph show the percentages of children who scored below the 25th percentile in the sub domains that comprise the Language & Cognitive Development domain. It seems from the graph that higher percentages of children in Chippawa Park Area and Welland South & South Pelham may have challenges with complex literacy skills and all three neighbourhoods may have challenges with being interested in literacy activities and remembering things. Rural Welland/Cooks Mills & Ontario Rd./Dain City also seem to have higher percentages of children having challenges with basic numeracy and literacy.



The rose and yellow areas are at or below the national average. Generally, the neighbourhoods highlighted in Welland seem to also have higher percentages of population without a high school diploma.



- 2007 Community Mapping Study
 - Compare EDI from 2002, 2005, 2006
 - Neighbourhood socioeconomic data
- 2007 Community Report
 - Analysis of parent interviews, direct assessments and community factors vis-a-vis 'school readiness'
- 2008 Community Report
 - Compare EDI from 2002, 2005, 2006, 2008
 - Compare neighbourhood data 2005, 2006 & 2008
- Continue to look into the “why” of low EDI at neighbourhood level
- Share information with community key stakeholders to improve 'school readiness' of children

- Any questions?
- How do you anticipate being able to use the information?
- What additional data would you be interested in?
- Who else might benefit from this information and how might they use it?

Thank you for inviting us!

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