

# Summary of the Survey

Early childhood is a pivotal period of development. Childhood experiences—both positive and negative—affect the development of motor, cognitive, social, and language skills. Studies have shown that vulnerability in kindergarten has been associated with difficulties in social adjustment and school success.<sup>1</sup> Indeed, nearly half of the vulnerable children in kindergarten will have lower-than-average school performance by the fourth grade.

The *Quebec Survey of Child Development in Kindergarten* (QSCDK),<sup>2</sup> carried out by the *Institut de la statistique du Québec* in 2012 and 2017 in all public and private French and English speaking schools in the province (excluding students who were handicapped or with adaptation/learning difficulties) provides a means of measuring the development of groups of children. As part of this study, teachers filled out a questionnaire consisting of 104 questions that had been validated and used in other provinces and countries for each of their students.<sup>3</sup> It should be pointed out that this questionnaire was based on observable behaviours related to developmental norms and was not designed to evaluate the curriculum, nor teacher/school performance.

## 5 Domains Assessed

The questionnaire made it possible to assess the proportion of vulnerable children in the following five domains:

Domain	Topics of Interest
Physical health and well-being	General physical development, motor skills, diet and dress, cleanliness, punctuality, alertness
Social competence	Social skills, self-confidence, sense of responsibility, respect of peers, adults, rules, and routines, work habits and autonomy, curiosity
Emotional maturity	Prosocial behaviour and mutual help, fear and anxiety, aggressive behaviour, hyperactivity and inattention, expression of emotions
Cognitive and language development	Interest and skills in reading, writing, and mathematics; adequate language use
Communication skills and general knowledge	Ability to communicate so as to make themselves understood, capacity to understand others, clear articulation, general knowledge

Children are considered vulnerable when their score in an area of development is equal to or lower than the threshold established in Quebec in 2012 (10th percentile of the distribution of results in the first cycle of the survey).

### These children are:

- facing a challenge because their mastery of certain aptitudes or skills is lacking,
- less equipped to take full advantage of what school can offer, and
- more likely to experience difficulties in school.

Information and mobilization activities will also be provided throughout 2019.

### References

- 1 SIMARD, Micha, Amélie LAVOIE and Nathalie AUDET (2018). *Enquête québécoise sur le développement des enfants à la maternelle 2017*, Québec, Institut de la statistique du Québec, 125 p.
- 2 *Gouvernement du Québec. Enquête québécoise sur le développement des enfants à la maternelle* [http://www.eqdem.stat.gouv.qc.ca/\[online\]](http://www.eqdem.stat.gouv.qc.ca/[online]). [Consulted on January 15, 2019].
- 3 Instrument de mesure du développement de la petite enfance, © 2000, McMaster University, Hamilton, Ontario, Canada. [http://www.eqdem.stat.gouv.qc.ca/enquete\\_2017/documentation/guide-imdpe-eqdem2017.pdf/\[online\]](http://www.eqdem.stat.gouv.qc.ca/enquete_2017/documentation/guide-imdpe-eqdem2017.pdf/[online]). [Consulted on January 15, 2019].



It is important to keep in mind that children considered vulnerable in kindergarten may not demonstrate difficulties throughout their entire primary school pathway.



### Redaction

Direction de santé publique

### Revision and layout

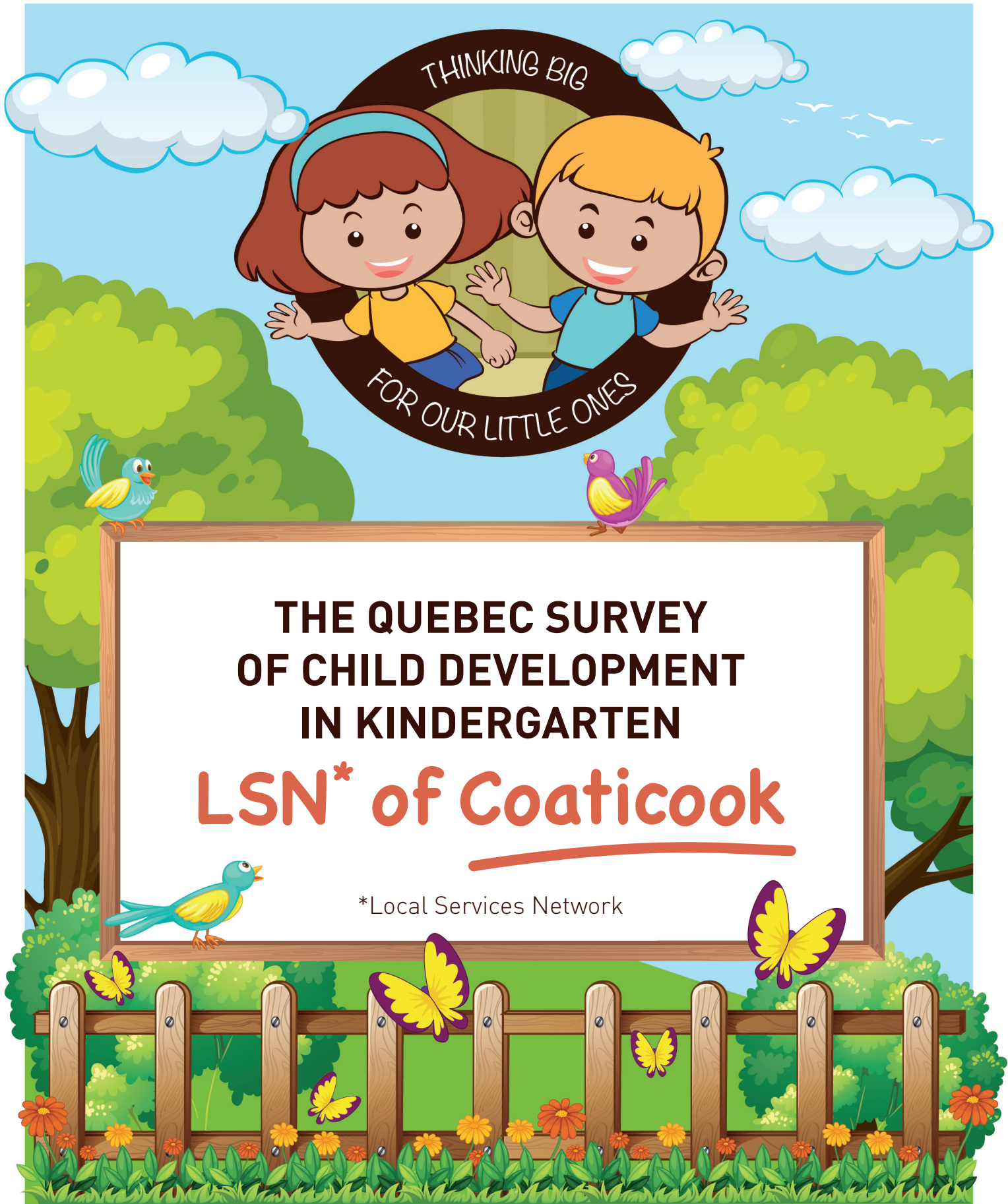
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March 2019 – All illustrations  
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# Findings for the LSN of Coaticook



In the Estrie region served by the health and social services system (CIUSSS de l’Estrie – CHUS), **300 kindergarten teachers** completed the QSCDK questionnaire for **4628 children** in **144 schools**, between February and April 2017, yielding a **93%** response rate. The following table breaks down the proportions of vulnerable children by domain of child development (showing vulnerability in at least one domain).

## Proportion of Vulnerable Children by Developmental Domain

Domain	LSN OF COATICOOK			ESTRIE			QUEBEC		
	2012	2017	Change	2012	2017	Change	2012	2017	Change
Physical health and well-being	10.4	8.9	Stable	9.8	11.4	Increase	9.5	10.6	Increase
Emotional maturity	12.8	12	Stable	10.1	13.3(+)	Increase	9.7	11.5	Increase
Social skills	*8.9	10.4	Stable	9.7	12.6(+)	Increase	9	10.2	Increase
Cognitive and language development	*7.8	15.1	Increase	10.7	13.2(+)	Increase	10	11.1	Increase
Communication skills and general knowledge	*6.7	8.4	Stable	10	11.4	Increase	10.8	11.1	Stable
At least 1 domain	26.1	28.6	Stable	26.8	29.4(+)	Increase	25.6	27.7	Increase

(+): Figure significantly higher than in the rest of Quebec (threshold of 0.05).  
Decrease/increase: Significant difference between the two cycles (threshold of 0.05 for Estrie and all the LSN; 0.01 for Quebec)  
\*: Coefficient of variation greater than 25%. The proportion is presented for informational purposes only.

In 2017, the population of kindergarten-aged children in the LSN of Coaticook was approximately **215**, with **28.6%** of them—approximately 60 children—demonstrating vulnerability in at least one domain of child development. The Coaticook findings are similar to that of the province as a whole, although the proportion of children vulnerable in the domain of cognitive and language development increased in Coaticook from 2012 to 2017.

## The Most Vulnerable Subgroups

In both the Estrie region and the province, the proportion of children vulnerable in at least one domain is greater in certain subgroups: boys, children under the age of 6 years, children who do not have French as their mother tongue, children born outside of Canada, children who live in underprivileged areas, and children who did not regularly attend day care before starting school. An unusual situation was noted in Coaticook, specifically a relatively high rate of vulnerability among children living in privileged areas. In addition, approximately 9% of the children have English as their mother tongue.

## Percentage of Children Vulnerable in at least One Domain (2017)

CHARACTERISTICS	LSN OF COATICOOK	ESTRIE	QUEBEC
Population breakdown	28.6	29.4(+)	27.7
By sex			
Boys	34	37.4(+)	35.0
Girls	22.4	20.6	20.2
By age			
Under 6 years of age	34	33.2	31.7
6 years or older	22.8	25.4	23.5
By spoken languages			
At least French	28.9	27.1	25.6
English but not French	np	50.3(+)	36.8
Neither French nor English	np	46.1(+)	34.6
By place of birth			
Canada	28.2	28.6	27.3
Outside of Canada	np	52.4(+)	33.6
According to physical and social deprivation			
Privileged	34.7(+)	22.5	22.9
Average	27.1	28.8	27.1
Underprivileged	*23.5	40.5(+)	34.6
Regular day-care attendance before starting school			
Yes	29.4	26	24.9
No	*30	41.4	38.5

(+): Figure significantly higher than in the rest of Quebec (threshold of 0.05).  
\*: Coefficient of variation greater than 25%. The proportion is presented for informational purposes only.  
Np: The data is not presented because of the small number of children or for reasons of confidentiality.

Some situations in the Estrie region are especially troubling. The differences are often greater in Estrie, as represented in the table, than in the province as a whole. To illustrate, the rate of vulnerability is almost two times higher among English-speaking children in the Estrie region than those who have French as their mother tongue, while the provincial ratio is at 1:4. In addition, vulnerability increased from 2012 to 2017 amongst boys (from 33.7% to 37.4%) and amongst children living in underprivileged areas (33.8% to 40.5%).

