

THE QUEBEC SURVEY OF CHILD DEVELOPMENT IN KINDERGARTEN

LSN* of Memphrémagog



*Local Services Network



Summary of the Survey

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

The *Québec Survey of Child Development in Kindergarten* (QSCDK)²—conducted in 2012, 2017, and 2022 by the Institut de la statistique du Québec (ISQ) in all English- and French-language public and private schools in the province (excluding students with special needs or learning difficulties)—measures the development of groups of children. As part of this study, teachers filled out a questionnaire consisting of 103 questions that had been validated and used in other provinces and countries for each of their students.³ It should be pointed out that this questionnaire was based on observable behaviours related to developmental norms and was not designed to evaluate the educational program or teacher or 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



We should keep in mind that not all children considered vulnerable in kindergarten will present difficulties throughout primary school.

Children are considered vulnerable when their score in a domain 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 falls short.
- less well equipped to take full advantage of what school can offer.
- more likely to experience difficulties in school.

Information and mobilization activities will also be provided starting in fall 2023.

Findings for the LSN of Memphrémagog



In the Estrie health and social services region, **316 kindergarten teachers** completed the questionnaire for **4,676 children** in **146 schools** between February and May 2022. This represents a response rate of 94.5%. The following table shows the proportions of five-year-old kindergarten children by domain, vulnerable in at least one developmental domain within the local service network (LSN; RLS in French).

In 2022, **25.9%** of five-year-old kindergarten children in the RLS de Memphrémagog were vulnerable in at least one developmental domain, representing nearly **120 children**. This proportion is comparable to that in the rest of Quebec for the 2022 survey cycle.

The proportions of vulnerable children by domain in the LSN are comparable to the rest of Quebec, with the exception of *communication skills and general knowledge*, which has a statistically lower proportion than the rest of Quebec (7.8% vs. 11.5% for Quebec as a whole). It is important to note that this proportion has a high coefficient of variation, so interpretation must be carried out with caution.

Proportion of Vulnerable Children by Developmental Domain

Domain	LSN OF MEMPHRÉMAGOG				ESTRIE				QUÉBEC			
	2012	2017	2022	Évolution	2012	2017	2022	Évolution	2012	2017	2022	Évolution
Physical health and well-being	11,4	9,8	9,6	↓ (n.s.)	9,8	11,4	11,6 (+)	↑ (n.s.)	9,5	10,6	10,3	↓ (n.s.)
Emotional maturity	10,6*	11,6	10,1	↓ (n.s.)	10,1	13,3 (+)	12,9 (+)	↓ (n.s.)	9,7	11,5	11,7	↑ (n.s.)
Social skills	15,8 (+)	12,5	9,1*	↓ (n.s.)	9,7	12,6 (+)	11,8 (+)	↓ (n.s.)	9	10,2	10,6	↑ (s)
Cognitive and language development	13,1	11,4	11,6	↑ (n.s.)	10,7	13,2 (+)	13,3 (+)	↑ (n.s.)	10	11,1	12,1	↑ (s)
Communication skills and general knowledge	13,2	13	7,8* (-)	↓ (s)	10	11,4	9,8 (-)	↓ (s)	10,8	11,1	11,5	↑ (s)
At least 1 domain	31,9 (+)	28,4	25,9	↓ (n.s.)	26,8	29,4 (+)	30,2 (+)	↑ (n.s.)	25,6	27,7	28,7	↑ (s)

(+/-): Figure significantly higher/lower than in the rest of Quebec (threshold of 0.05)

(s): Significant difference between the 2017 and 2022 cycles (threshold of 0.05 for Estrie and RLSs; 0.01 for Quebec)

(n.s.): Difference not significant between the 2017 and 2022 cycles (threshold of 0.05 for Estrie and RLSs; 0.01 for Quebec)

* Coefficient of variation greater than 15% and less than or equal to 25%

Legend:

Increase ↑

Decrease ↓

Between 2017 and 2022, the proportions of vulnerabilities remained comparable, with the exception of *communication skills and general knowledge*, which shows a significant decrease. It is important to note that some of the coefficients of variation of the proportions are relatively high. The data must therefore be interpreted with caution.



Most Vulnerable Subgroups

The proportion of five-year-old kindergarten children in the LSN vulnerable in at least one domain is higher in certain subgroups: Boys, children under 6 years of age, children living in disadvantaged areas, and children who did not attend daycare regularly before starting school. It should be noted that the coefficients of variation for some data are high, requiring cautious interpretation.



Percentage of Vulnerable Children in at least One Domain (2022)



CHARACTERISTICS	LSN OF MEMPHRÉMAGOG	ESTRIE	QUEBEC
	% of vulnerable children	% of vulnerable children	% of vulnerable children
Population breakdown	25,9	30,2 (+)	28,7
By sex			
Boys	32,2	36,6	35,6
Girls	19,5	23,5 (+)	21,6
By age			
Under 6 years of age	33,2	34,4	32,7
6 years or older	19,4	26,1	24,7
By spoken languages			
At least French	24,6	29,2 (◊)	27,1
English but not French	39*	44,9	37,5
Neither French nor English	NP	51,7 (◊)	38,4
By place of birth			
Canada	25,8	29,6 (◊)	28
Outside of Canada	NP	42,3	37,3
According to physical and social deprivation			
Privileged	19,5*	22,8	23,8
Average	25,5	30,7	28,8
Underprivileged	29,5	39,4 (◊)	34,8
Regular day-care attendance before starting school			
Yes	23,4	27	25,8
No	41,8*	40,8	40,9

(+): Figure significantly higher than in the rest of Quebec (threshold of 0.05).
 (◊): Figure significantly higher than in Quebec overall (threshold 0.05)
 * Coefficient of variation greater than 15% and less than or equal to 25%
 NP: Due to the low number of children or to respect confidentiality, the data is not presented.

The proportion of five-year-old kindergarten children in the LSN vulnerable in at least one domain is higher among certain subgroups, although the differences are not statistically significant for all crossover variables when compared to the rest of Quebec. Nearly 1 boy in 3 is vulnerable in at least one domain (32.2%). The proportion is also higher for children under 6 years of age (33.2% vs. 19.4% for children aged 6 and over). Children living in disadvantaged areas have higher proportions (29.5%), although not statistically different from Quebec as a whole.

The proportions for the subgroups are statistically comparable to those of the 2017 version of the survey.



The response rate reached **97%** in the LSN of Memphrémagog

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