

COGNITIVE DEVELOPMENT

INDICATOR #47 Child Literacy

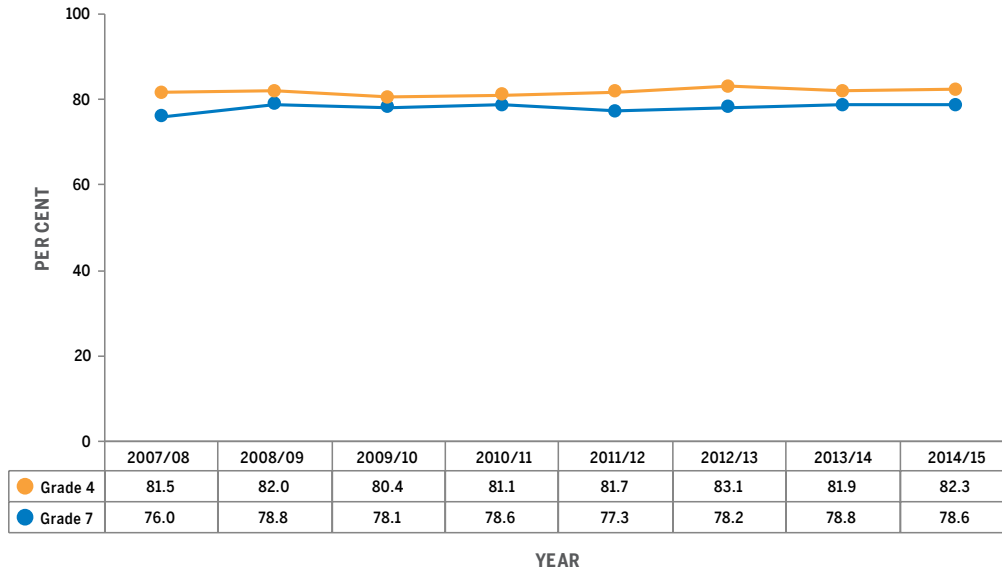
DEFINITION

INDICATOR #47 — Percentage of BC students in grade 4 and grade 7 (writers only) who meet or exceed expectations on the grade 4 and grade 7 Reading section of the Foundation Skills Assessment.

KEY MESSAGES

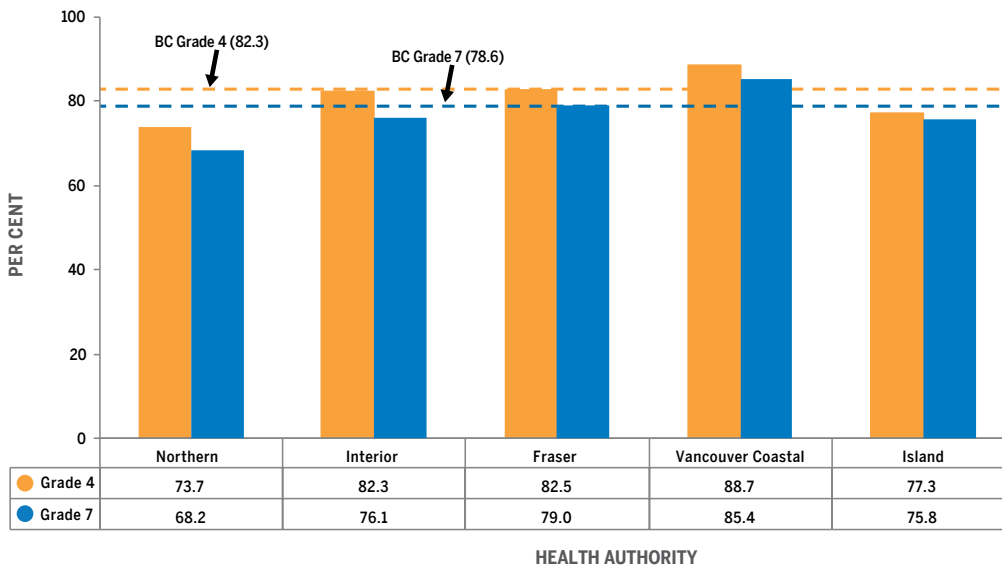
- ▶ The development of reading and writing abilities occurs in early childhood in a concurrent and interrelated fashion. Reading and writing abilities are so interdependent that they, along with oral language development, are often collectively referred to as **literacy**.¹ However, data analyses presented here are limited by the current inability to combine the two components of reading and writing in the Foundation Skills Assessment (FSA) into a single “literacy” indicator; therefore, reading is being used as a proxy indicator of literacy, in accordance with the focus on reading identified in the majority of evidence reviewed.¹
- ▶ Research has found that in general, the better educated people are, the healthier they are. Researchers believe that cognitive factors, such as verbal skills, and reading and writing abilities, play a key role in mediating this relationship with health outcomes.² While educational attainment has been traditionally correlated with health outcomes, recent evidence suggests that better academic performance is also strongly linked to better health later in life.³
- ▶ The relationship between adult literacy and health outcomes has been well documented, with lower literacy being linked to problems with the use of preventive services, delayed diagnoses, lack of understanding of one’s medical condition, lack of adherence to medical instructions, lower ability to self-manage your health, lower levels of physical and mental well-being, and increased mortality risk.⁴
- ▶ Figure 47.1 shows that among those who completed the FSA test, the percentage of BC children in grades 4 and 7 who met or exceeded expectations on the Reading section remained steady from 2007/2008 to 2014/15. The data for this period also show that the percentage of children who met or exceeded expectations in grade 4 was higher than the percentage of those in grade 7.
- ▶ Figures 47.2 and 47.3 show that among those who completed the FSA, there are geographic differences in the percentage of grade 4 and grade 7 students who met or exceeded expectations on the Reading section of the FSA. Figure 47.2 illustrates that Northern Health had approximately 10 per cent fewer students in both grades that were meeting or exceeding expectations compared to those in Vancouver Coastal Health. This variation by geography is even more evident when data are reviewed by health service delivery area, which reveals a differential of almost 20 per cent between the lowest and highest areas (Figure 47.3).

FIG 47.1 Percentage of Students in Grades 4 and 7 Who Meet or Exceed Expectations in Reading, BC, 2007/08 to 2014/15



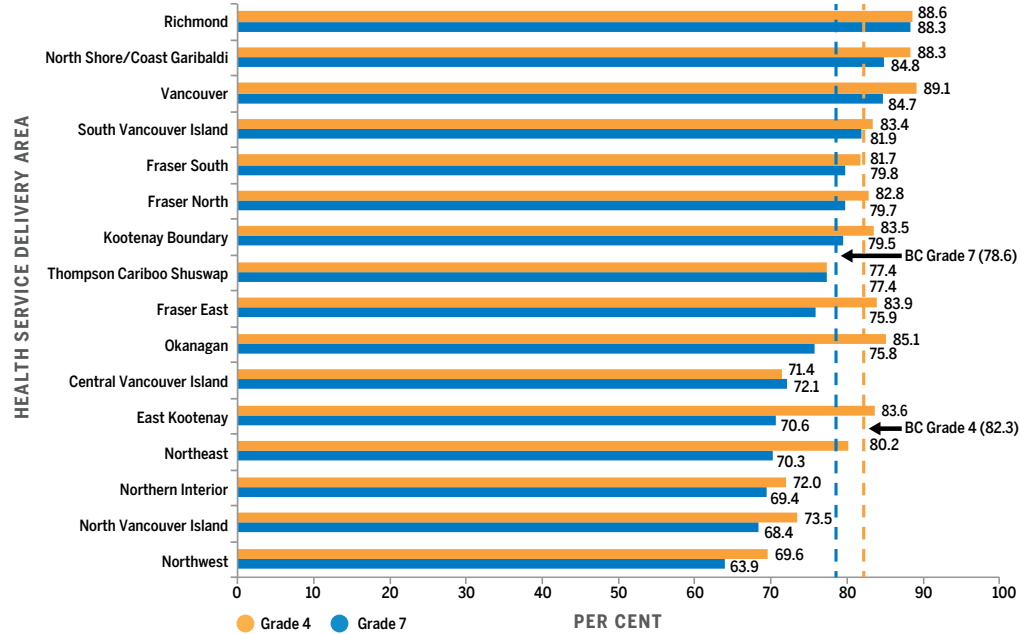
Notes: "Meet or exceed expectations" means an assessment of Meets Expectations (Minimal to Moderate), Fully Meets Expectations, or Exceeds Expectations on the Foundation Skills Assessment (FSA). Data only include those students who wrote the FSA. See Appendix B for more information about this data source.
Source: BC Ministry of Education, Foundation Skills Assessment scores, 2007/08–2014/15. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

FIG 47.2 Percentage of Students in Grades 4 and 7 Who Meet or Exceed Expectations in Reading, by Health Authority, BC, 2014/15



Notes: "Meet or exceed expectations" means an assessment of Meets Expectations (Minimal to Moderate), Fully Meets Expectations, or Exceeds Expectations on the Foundation Skills Assessment (FSA). Data only include those students who wrote the FSA. Health authority is based on the location of the school. See Appendix B for more information about this data source.
Source: BC Ministry of Education, Foundation Skills Assessment scores, 2014/15. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

FIG 47.3 Percentage of Students in Grades 4 and 7 Who Meet or Exceed Expectations in Reading, by Health Service Delivery Area, BC, 2014/15



Notes: "Meet or exceed expectations" means an assessment of Meets Expectations (Minimal to Moderate), Fully Meets Expectations, or Exceeds Expectations on the Foundation Skills Assessment (FSA). Data only include those students who wrote the FSA. Health service delivery area is based on the location of the school. See Appendix B for more information about this data source.

Source: BC Ministry of Education, Foundation Skills Assessment scores, 2014/15. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

REFERENCES

- ¹H. Krueger & Associates. Child and youth health and well-being indicators project: appendix J – cognitive development evidence review [prepared for the Office of the Provincial Health Officer and the Canadian Institute for Health Information]. Ottawa, ON: Canadian Institute for Health Information; 2011.
- ²Strickland DS, Morrow LM. Emerging literacy: young children learn to read and write. Newark, DE: International Reading Association; 1989.
- ³Dewalt DA, Berkman ND, Sheridan S, Lohr KN, Pignone MP. Literacy and health outcomes: a systematic review of the literature. *J Gen Intern Med.* 2004 Dec;19(12):1228-39.
- ⁴Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Crotty K. Low health literacy and health outcomes: an updated systematic review. *Ann Intern Med.* 2011 Jul 19;155(2):97-107.