



# COVID-19 Impact Indicators Report

Northwest Territories JK-12 Education System

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Perihtł'ís Dëne Sųłiné yati t'a huts'elkër xa beyáyati thezą zat'e, nuwe ts'ën yółti.  Chipewyan
Edi gondi dehgáh got'je zhatié k'éé edatł'éh enahddhę nide naxets'é edahłí.  South Slavey
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Uvanittuaq ilitchurisukupku Inuvialuktun, ququaqluta. Inuvialuktun
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# Introduction

The COVID-19 pandemic (pandemic) has had a significant impact on schooling globally and in the Northwest Territories (NWT). Since the beginning of the pandemic every school in the territory had to close and pivot to remote learning at various times.

The Department of Education, Culture and Employment (ECE) regularly measures several Junior Kindergarten to Grade 12 (JK-12) student outcomes that, over time, could provide insight into the impacts of the pandemic on the education system. This indicator report serves as a high level overview of key data currently available to shed light on the impacts of the pandemic on our education system. As ECE gains access to additional data and information over the next few years, further analysis and revisions will be made to this report that will provide a more comprehensive assessment of the potential impacts the pandemic had on our education system and students.

This document is limited to and outlines the various indicators currently available to ECE to assess the educational impacts of, and recovery from, the pandemic. The purpose of this document is to provide insight and data to ECE – and the public – into the different ways the pandemic *may have* affected student success and the education system in the NWT. The information in this report includes data up to and including the 2020-2021 school year.

The indicators are grouped into themes that reflect the areas of education that are most relevant. Those categories are:

- 1. Student Health and Well-being
- 2. Student Achievement
- 3. Teaching and Learning

The final column of these indicators includes an 'assessment,' which shows the overall health of that indicator as either "positive," "watching", or "concern". The health is determined by considering (a) whether the indicator is currently above, at, or below its pre-COVID value, (b) the direction that the indicator is trending, and (c) whether the current trend is meaningful or significant.

Assessments				
POSITIVE	WATCHING	CONCERN		
This indicator is trending	This indicator is not trending	The indicator is trending		
positively and/or has reached or	positively and has not reached	negatively and is below pre-		
exceeding pre-COVID values.	or exceeded pre-COVID values.	COVID values. These indicators		
		identify areas of most concern.		

# Student Health and Well-being

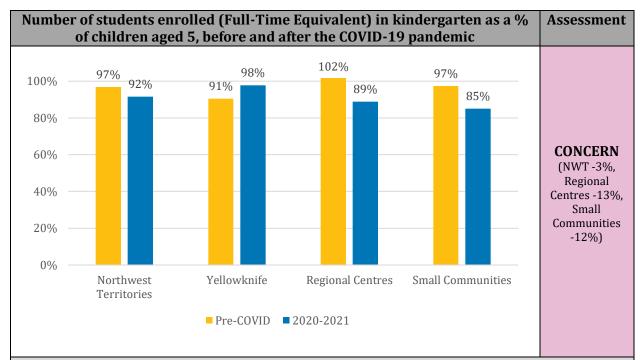
Student Health and Well-being are tracked by ECE through two survey instruments: The Early Development Instrument (EDI) and the Middle Years Development Instrument (MDI).

## Early Development Instrument (EDI)

The EDI is a survey of children attending kindergarten to assess their ability to meet age-appropriate developmental expectations in five areas: physical health and well-being; social competence; emotional maturity; language and cognitive development; and communication skills and general knowledge. The survey is filled out by kindergarten teachers every February to assess students' developmental readiness for Grade 1. The results of the EDI are highly associated with later measures of students' success in school.

Before assessing the EDI survey results data before and after the start of the pandemic, it is important to compare the uptake of kindergarten enrollment during this period as well. Fewer children participating in the program could lead to fewer children being prepared for Grade 1.

The NWT 2020-2021 enrollment in kindergarten, as measured by the percentage of children aged five, decreased by 5% compared to pre-pandemic levels. Changes in enrollment were not equal across communities. Yellowknife experienced a 7% increase whereas the regional centres and small communities experienced a decrease of 13% and 12% respectively. This decrease outside of Yellowknife could reflect a relatively higher concern of COVID-19 exposure in areas outside of Yellowknife where healthcare services and treatments are more limited.



Source: Department of Education, Culture and Employment

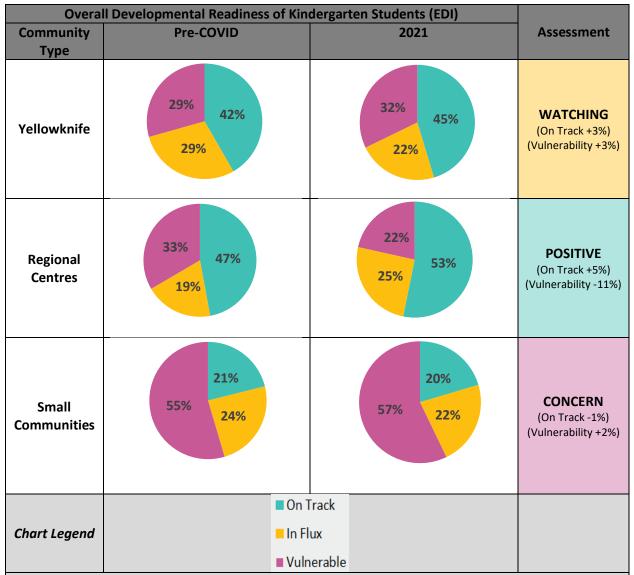
Note: Regional Centres refer to Inuvik, Hay River, and Fort Smith. Small Communities are all NWT communities outside of Yellowknife and Regional Centres. Pre-COVID is an average of student enrollment for 2017-2018, 2018-2019, and 2019-2020. Figures can exceed 100% due to children can enrol into the program if they are 5 years of age on or before December 31st of the year in which their classes are to begin. Nonetheless, using population data of children aged 5 provides a base line to allow trends to be shown that are not based on population fluctuations.

The EDI survey results are based on children being *On Track, In Flux,* or *Vulnerable* in the five development categories. Students who are *On Track* in all five areas are given an overall rating of *On Track*, those who are *Vulnerable* in one or more categories are given a rating of *Vulnerable*, and all others are rated as *In Flux*.

The overall developmental readiness of kindergarten students across the territory is determined by the rate of *On Track, In Flux,* and *Vulnerable*. A positive trend is *On-Track* rates increasing over time and *Vulnerability* rates decreasing over time.

As seen in the chart above, enrollment in kindergarten programs in small communities has decreased compared to pre-COVID-19 levels, and EDI results below highlight that the children who are participating in these kindergarten programs are demonstrating lower levels of school readiness.

Similarly, enrollment in kindergarten in regional centres has also decreased from pre-COVID levels, but there has been a significant decrease in the number of children classified as vulnerable. On the other hand, Yellowknife has remained steady in both enrollment numbers and the overall development readiness of kindergarten students.



Source: Offord Centre for Child Studies, McMaster University.

Note: EDI: Early Development Instrument. This is a survey filled out by kindergarten teachers every February to assess students' developmental readiness for Grade 1. Regional Centres refer to Inuvik, Hay River, and Fort Smith. Pre-COVID is an average of Overall Readiness for 2018, 2019 and 2020.

As previously noted, there are five key domains used in EDI survey to assess children's ability to meet age-appropriate developmental expectations, these include: physical health and well-being; social competence; emotional maturity; language and cognitive development; and communication skills and general knowledge. Considering the territory-wide data, a positive trend in the *Vulnerability* of a category means it is **lower** than the pandemic levels.

Vulnerability of NWT Kindergarten S	Assessment		
Domain	Pre-COVID	2021	Assessment
Physical Health and Well-being	24%	20%	POSITIVE
Social Competence	14%	16%	CONCERN
Emotional Maturity	18%	14%	POSITIVE
Language & Cognitive Development	16%	17%	CONCERN
Communication Skills & General Knowledge	18%	18%	WATCHING

Source: Offord Centre for Child Studies, McMaster University

Note: EDI: Early Development Instrument. Pre-COVID is an average of each domain for the following years 2017-2018, 2018-2019, and 2019-2020.

## Middle Years Development Instrument (MDI)

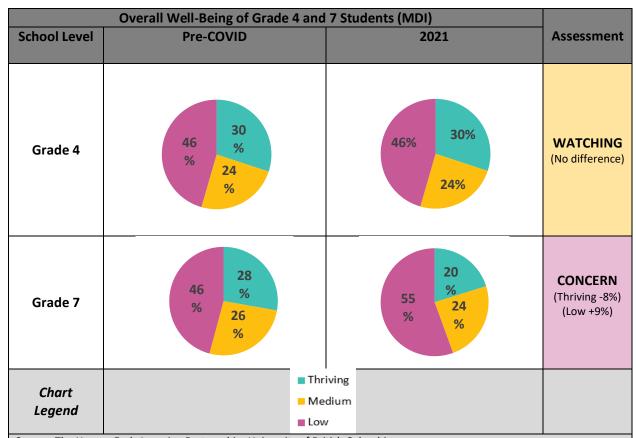
In Grade 4 and 7, students in the NWT complete the Middle Years Development Instrument (MDI) survey every year in January and February. The MDI uses a strengths-based approach to assess five areas of development that are strongly linked to well-being, health, and academic achievement. These areas are social and emotional development, physical health and well-being, connectedness, use of after-school time, and school experiences.

The **Well-Being Index** for a student is determined by looking at their scores on questions in the social and emotional development, and physical health and well-being categories.

- Children who score in the high range 4/5 measures of well-being and have no low scores are classified as **Thriving**.
- Children who score low in at least 1/5 measures are classified as **Low** well-being.
- All others are classified as **Medium** well-being.

#### **Overall Well-Being of Grade 4 and 7 Students**

In 2020-2021, children in older grades reported lower levels of well-being compared to before the pandemic. There were no changes in Grade 4 students who identified as *thriving*, *medium* or *low* for overall well-being. Contrarily, Grade 7 students experienced a decrease of 8% in the number of students reporting as *thriving*, and the number of students reporting as *low* increased by 9%.



Source: The Human Early Learning Partnership, University of British Columbia.

Note: MDI: Middle Years Development Instrument. This is a survey filled out by Grade 4 and Grade 7 students in January and February each year. It provides insight into the well-being of school-aged children. Regional Centres refer to Inuvik, Hay River, and Fort Smith. Pre-COVID is an average of 2017-2018, 2018-2019, and 2019-2020.

#### Percentage of Grade 4 and 7 students reporting a presence of an asset

As part of the MDI, Grade 4 and 7 students report whether they have the presence of "assets" in their lives – those are positive experiences, relationships or behaviours that help them succeed. Examples include adult relationships, peer relationships, nutrition and sleep, and after-school activities. Assets are considered actionable, which means schools and communities can focus their efforts in these areas to create those conditions and contexts where children can thrive.

In the 2020-21 school year, there was a decrease in both grades in each of the asset categories, with Grade 7 experiencing the largest decrease. Assets decreased for Grade 7 in the range of 5% to 13%, whereas the Grade 4 assets experienced a smaller decrease, ranging from one- to five percent.

These decreases in reporting of assets and overall well-being for Grade 7 students are likely explained by the pandemic. The shift to online learning and limited in-school time has likely negatively impacted students' ability to connect with adults at school, build meaningful relationships with peers, partake in after-school activities, and maintain healthy eating and sleeping habits.



Source: The Human Early Learning Partnership, University of British Columbia.

Note: MDI: Middle Years Development Instrument. This is a survey filled out by Grade 4 and Grade 7 students in January and February each year. It provides insight into the well-being of school-aged children. Regional Centres refer to Inuvik, Hay River, and Fort Smith. Pre-COVID is an average of 2017-2018, 2018-2019, and 2019-2020.

## Student Achievement

Student Achievement is currently tracked through course completion rates and high school graduation rates.

## **Course Completion Rates for Core Subject High School Courses**

For high school students to move from one grade to the next, they must successfully complete a set of required courses at grade 10, 11, and 12 levels. Core subjects are those that all high school students must complete to meet the minimum requirements to advance to the next grade or graduate (math, English, French, social studies, science, and northern studies).

Changes to how education was delivered during the pandemic, such as the switch to remote learning and the cancellation of diploma exams, had an impact on course completion rates in 2019-2020 and 2020-2021.

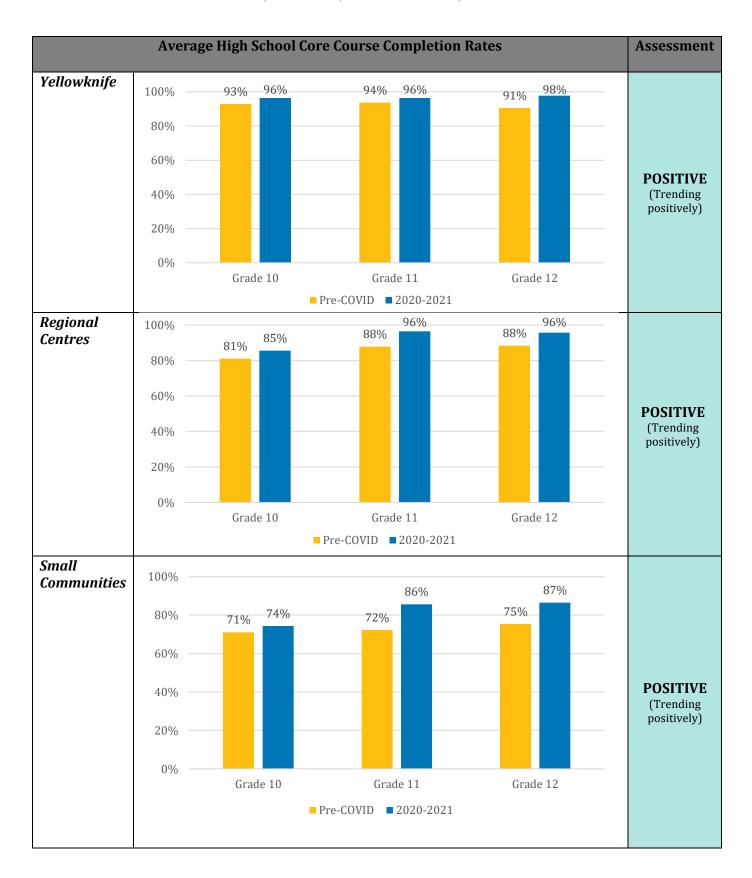
Starting mid-March 2020, all schools across the NWT were closed for the remainder of the 2019-2020 school year and needed to transition to remote learning. On March 30, 2020, ECE released an <a href="https://www.nwt.edu.com/nwt/Education Bulletin">NWT Education Bulletin</a> that outlined various accommodations offered for assisting students in completing high school courses. Schools could request a course waiver for students in certain subjects. In cases when students were not able to complete their current courses, schools could provide students with alternative assignments or projects so they could finish courses and receive credit.

In the 2020-2021 school year:

- Most JK-12 students had a blended education program, with part-time in-person instruction and part-time remote learning.
- Mature students (19 years of age or older) attended school remotely due to health and safety guidelines.
- There were periods of full closures because of COVID-19 outbreaks and related Public Health Orders (PHO) announced by the Office of the Chief Public Health Officer (CPHO).
- Diploma exams were offered but were optional. Those who did not write a diploma exam were assigned their class mark as their final mark.

As such, comparing these rates to previous years should be done with caution considering the changes to educational instruction in response to the pandemic.

When comparing pre-COVID-19 high school core course completion rates to those in the 2020-2021 school year, the rates are trending positively across all grades and all community types. Notably, there was a spike of 14% and 12% in grades 11 and 12, respectively, in small communities. This is likely due to fewer students taking these core courses, which results in a higher passing rate.



Source: Department of Education, Culture and Employment Notes:

- 1. Regional Centres refer to Inuvik, Hay River, and Fort Smith. Small Communities are all NWT communities outside of Yellowknife and Regional Centres. Pre-COVID is an average of 2017-2018, 2018-2019, and 2019-2020.
- 2. Pre-COVID comparisons should be done cautiously due to the requirement to write diploma exams was dropped and those who did not write a diploma exam were assigned their class mark as their final grade.

#### **Grade 6 and 9 Alberta Achievement Test Results**

The Alberta Achievement Tests (AATs) are standardized exams and assessment tools for Grade 6 and 9 students in the NWT in the subject areas of Language Arts, Mathematics, Français, and Mathematiques. Due to the pandemic, the AATs were not written in the 2019-2020 and 2020-2021 school years. The AATs are scheduled to resume in the 2021-2022 (June session only) and 2022-2023 school years.

Reinstating the AATs will provide the opportunity to assess the impacts of the pandemic on one cohort of middle school students. Students who were in Grade 6 in the 2018-2019 school year are now in Grade 9 in the 2021-2022 school year. ECE will be able to link the results of students who take the Grade 9 AATs in the June sitting with their Grade 6 results from the 2018-2019 school year.

As the <u>NWT is changing provincial partnerships for its JK-12</u> school curriculum, the AATs are being phased out after the 2022-23 school year. The timeframe for implementing the new school curriculum is still pending.

## **Senior Secondary Student Diploma Exam Results**

As mentioned earlier, the writing of diploma exams was impacted by the pandemic. Alberta Diploma Examinations are written for select Grade 12 courses, such as English Language Arts, Mathematics, Biology, and Social Studies. The purpose of the exams is to certify the level of individual student achievement in these courses, to ensure that standards of achievement are maintained, and to report individual and group results.

#### These exams were:

- Cancelled in June 2020.
- Offered, but optional, for the 2020-21 academic year. They were also weighted at 10% of the final mark, versus the usual 30% in previous years.
- Cancelled again in November 2021 and January 2022, resumed in June 2022.

In the 2020-2021 school year, since diploma exams were optional, less than 30 exams were written across the territory. Students who did not write diploma exams were assigned their school-based course mark as their overall mark.

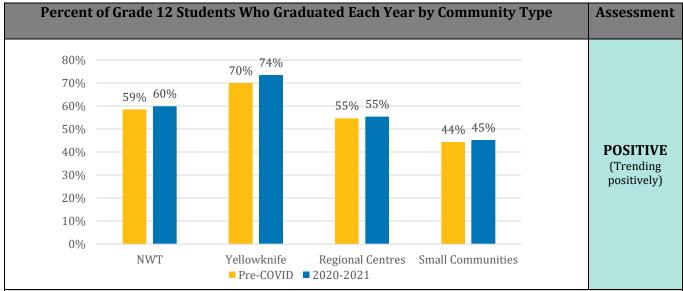
The diploma exams will resume in June 2022; however, some education bodies have opted out of that sitting. The Hay River area, for example, experienced major spring flooding, which caused more disruption to the education system.

The limited diploma exam results impede the ability to draw any conclusions about the data for these school years. Further determinations will be possible in future years when test results are available more consistently.

## **High School Graduation Rate**

Graduation rates in 2020 and 2021 have been slightly impacted by the pandemic. However, <u>since</u> the current graduation rate allows students up to six years to complete high school, and the student cohort underlying the 2020 and 2021 rates started high school in the 2014-2015 and 2015-2016 academic years respectively, the effect of the pandemic on that group's graduation rate is small.

Pandemic impacts on the Six-Year Graduation Rate will be more prominent for the cohort where the pandemic corresponds with their 3rd and 4th year since starting high school, which will be the 2022 and 2023 Six-Year Graduation Rates.



Source: Department of Education, Culture and Employment

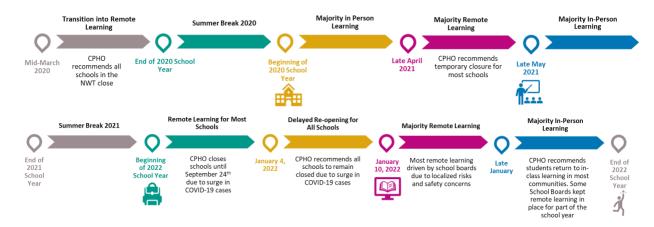
Note: Regional Centres refer to Inuvik, Hay River, and Fort Smith. Small Communities are all NWT communities outside of Yellowknife and Regional Centres. Pre-COVID is an average of 2017-2018, 2018-2019, and 2019-2020.

# Impacts on Teaching and Learning

Impacts on teaching and learning are measured by the number of school closure days and the number of educators.

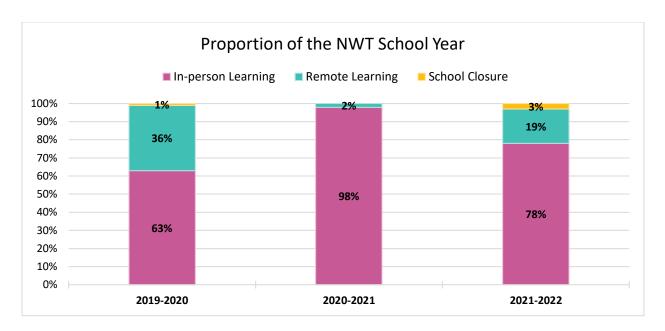
#### The COVID-19 Pandemic and School Closures

One notable effect the pandemic has had on the NWT education system has been school closures and the shift to remote learning. The infographic below provides a high-level overview of the school closures and re-openings, tracing from March 2020 to April 2022.



During the 2019-2020 school year, the Chief Public Health Office recommendations were driving the decision for school closures. As COVID-19 cases became more prevalent in the territory in the subsequent two school years, decisions to pivot to remote learning by school boards were based not only on CPHO recommendations, but also on localized risk and safety concerns related to the pandemic. The percentage of school closures decisions made without a CPHO recommendation in 2020-2021 was 27% and, in 2021-2022, 32%.

The chart below summarizes the average proportion of the school year that schools were open to in-person learning, remote learning or completely shutdown, due to the pandemic.



The **2019-2020 academic year** was the most impacted by school closures and shifts to remote learning, reflecting the national response to the pandemic. The transition during this school year to remote learning was extremely challenging, as teachers and students were just returning, leaving or in the middle of their spring breaks. Following the announcement to close schools, some of the territories' teachers scheduled to travel back to the territory experienced flight disruptions, with no access to their school or teaching materials needed to provide their lessons. Coupled with the difficulty in preparing for a remote learning platform that was not previous planned for, this resulted in a delayed and varying start-times for students to fully resume their schoolwork remotely. As well, students were not able to continue their courses that relied on in school teachings, such as Career and Technology Studies, Physical Education, or work towards their community services hours.

The **2020-2021 academic year** was the least affected by pandemic in terms of school closures. On average, schools were in remote learning for 2% of the academic year due to CPHO recommendations. Some students may have spent more time out of school if, for example, parents chose to keep their kids home when the schools were open. Despite that most of the school year was in-person, the strict guidelines to keep students and staff safe meant it was not reflected of a normal school year. Students and staff had to adhere to strict distancing requirements for junior and senor high schools, which meant not all schools had students returning full-time. Students 19 years of age and older were not allowed to attend in person. Extracurricular activities, particularly sports or physical activity related, drama and music programs were all significantly affected.

The **2021-2022 academic year** saw an easing of restrictions, however, based on the school closure data, this was likely the most interrupted school year for many students. In addition, the impact of COVID-19 has not been distributed equally across the territory. For example, schools in the Dehcho region were in remote learning for 13% of the school year, whereas Dettah students were in remote learning for 40%. School-based extracurricular activities were still restricted, while other afterschool programs organized by community organizations started to resume. Having organized

sports and other community-based programs provided an option for students with after-school activities, which contributed greatly to their overall well-being.

#### **Number of NWT Educators**

The term educators in this report refers to a broad category comprised of teachers, school administrators who teach occasionally and pedagogical support (e.g., educational assistance, guidance counselors and librarians).

The growth in the number of educators at the community level has not been consistent over the past few years. Yellowknife, before the pandemic, experienced a modest annual increase less than 1%, whereas the regional centres and small communities have seen figures increase significantly.

One of the drivers of growth in the number of educators could be attributed to federal program: Jordan's Principle Child First Initiative Funding Program. Funding under this program in 2018-2019 was just over \$6 million and in 2020-2021 it increased to just over \$28 million. Approximately 80% of the 2020-2021 funding went to education authorities outside of Yellowknife and is predominantly spent on wages for support assistant positions, literacy and numeracy services, and specialized educational support services.

We currently do not have data to shed light on the overall well-being of teachers during the pandemic in general. Further investigation and data collection are required to provide a more holistic picture of the impact of the pandemic on NWT educators.

Number of Educators by Community Type				
	Pre-COVID	2020-2021	Net	Assessment
			Difference	
NWT	1014	1191	177	POSITIVE
Yellowknife	397	418	21	POSITIVE
Regional Centres	219	269	50	POSITIVE
Small Communities	398	504	106	POSITIVE

Source: Department of Education, Culture and Employment

Note: Regional Centres refer to Inuvik, Hay River, and Fort Smith. Small Communities are all NWT communities outside of Yellowknife and Regional Centres. Pre-COVID is an average of 2017-2018, 2018-2019, and 2019-2020

## Conclusion

As with other jurisdictions across Canada, there are substantial data gaps in assessing COVID-19's impact on students. ECE will continue to collect, analyze, and report on key findings related to the impacts of COVID-19 on student outcomes as more relevant data becomes available.

The pandemic was a significant disrupter to the education system as a whole. The shift to remote learning, the limitations to connect with one's community, engage in after school programming has had a negative impact on the well-being and academic experiences for most students. The following highlights the impacts the pandemic has on the JK-12 education system:

- EDI data: Enrollment was down for kindergarten compared to pre-COVID levels. Kindergarten students in small communities had lower developmental readiness reporting for Grade 1. There was a decline in the reporting of social competency and language and cognitive development domains during the pandemic.
- MDI data: Students in Grades 4 fared better than older students in Grade 7. Fewer Grade 7 students were thriving and more reported low overall well-being.
- AATs and diploma exams were not conducted, and attendance was difficult to properly maintain in 2019-2020 through to 2021-2022 school period, making inferences on the impact difficult.

In the coming years, ECE anticipates that grades, test results, and graduation rates will be lower than in pre-pandemic years. Further research will be required to provide a more comprehensive analysis of the impact of the pandemic on the education system.

In addition to the indicators noted in this report, ECE will closely monitor the needs of NWT students using existing wellness data, referrals for school-based mental health and wellness services, and academic progress reports provided by education bodies.

While there is not a single solution to the challenges students may face as a result of school closures and inconsistencies in learning during the pandemic, ECE provides a multitude of resources and programs that can help.

In addition to this report, there are annual reports on the current state of the NWT education system by using the Education Renewal and Innovation (ERI) Framework, which can be found <a href="here">here</a> on the ECE website.

Resources for mental wellness supports can be found <u>here on the ECE website</u>. There are also resources available through Health and Social Services.

# Appendix A | Document Version History

Version	Date	Author	Change Status
1	October 2022	ECE	First issued version
2	March 2023	ECE	Removed inaccurate references to decreases in Yellowknife teacher numbers in paragraphs 3 and 4. (page 17)  Updated table: totals in NWT and Yellowknife rows for 2020-21, Net Difference and Assessment numbers. (page 17)  Removed fourth bullet noting decrease in Yellowknife teacher numbers. (page 18)