

# **Inclusive Education Snapshot:**

# Prevalence over Time of BC's K-12 Students with Learning Exceptionalities and Disabilities

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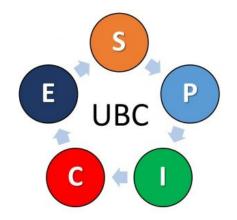
Supporting Progressive Inclusive Child-centred Education (SPICE) Research Lab

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#### Report available at:

http://spice.nursing.ubc.ca/





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#### Introduction

#### Why this Report?

We are pleased to have prepared this report, entitled "Inclusive Education Snapshot: Prevalence over Time of BC's K-12 Students with Learning Exceptionalities and Disabilities", to provide readers with a user-friendly visual snapshot of trends in the province-level counts and percentages over time of Kindergarten to Grade 12 students across the multiple categories of "special needs designations" annually tracked by the British Columbia Ministry of Education (BCMED).

To this end, we have created a series of clear and concise line graphs presenting the prevalence across school years of British Columbia's students with learning exceptionalities and disabilities. We have presented this information for the whole province, and, where possible, also separated into public school students and independent (private) school students.

We have also situated this information in the provincial context by presenting the total count of all students (with and without designations, combined), so readers have a clear understanding of the total student enrollment in the province over time.

#### **BC Government's Open Data**

The line graphs we present in this report represent a unique package of information we have created from "open data" kindly provided to the general public by the DataBC unit of the BC Government. Open data refer to data that are readable by popular software packages, freely-shared by government and other agencies, and which may be used without special permissions or restrictions.



We have provided an excerpt of the mandate of DataBC on Page 30 of this report. Those interested in learning more about the specific data holdings analysed in this report, and also about other open data available, are invited to visit <a href="DataBC's web site">DataBC's web site</a> (<a href="https://www2.gov.bc.ca/gov/content/data/about-data-management/databc">https://www2.gov.bc.ca/gov/content/data/about-data-management/databc</a>).

#### **Research Ethics**

Because we worked with open data, we did not require ethical approval from the University of British Columbia, nor did we require a Research Agreement or Memorandum of Understanding with the BCMED.

#### Special Feature: "Highlights" Boxes

Throughout the report, we have strived to make the information presented in the line graphs as user-friendly and easily interpretable as possible for a wide audience of readers. Therefore, alongside each of the line graphs showing the prevalence trends over time, we have also embedded an accompanying "Highlights" box, in which we have summarised the general 'take-home message' of each graph as clearly and concisely as possible. Please note that the highlights do not necessarily suggest statistically significant trends; rather, they are general observations of the findings.



#### Conclusion

This report is an important step forward in our knowledge about trends over time in the prevalence of British Columbia's students with learning exceptionalities and disabilities. It allows for readers to compare and contrast across multiple designations, as well as to explore designations which show increases in prevalence, decreases in prevalence, consistency in prevalence, and/or any other pattern(s) over time. We hope that the results will be useful in providing evidence to guide programs and policies, both here in British Columbia and beyond.

We welcome you to contact us if you have any questions about this report. Our contact information is on Page 31.

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## Methodology

We carefully analysed these data to create the line graphs that follow. Here, we explain the methodology we followed to create this report.

#### **Source Data & Open Data Field Definitions**

For many line graphs, we made use of an open data file called "Student Headcount by Special Needs Category 1991\_92 to 2019\_20", which is freely available for download (https://catalogue.data.gov.bc.ca/dataset/student-headcount-by-special-needs-category). For the "All Students" provincial context graph, we used an open data file called "Student\_Headcount\_by\_Grade\_Range 1991\_92 to 2019\_20", which is downloadable here (https://catalogue.data.gov.bc.ca/dataset/student-headcount-by-grade-range). For the "Percentage of Designation Z" graphs, we combined both files. When working with the "Grade Range" file, we summed together province-level counts of students across all of these grade ranges present in the data: Elementary, Elementary Junior Secondary, Elementary Secondary, Junior Secondary, Middle School, Secondary, Senior Secondary, and Unspecified.

We invite readers to visit the web sites above to access the field definitions for the respective open data files used in this report, as well as the BCMED's tips for working with these data.

#### **Creating the Working Data**

The data files described above contain province-, district-, and school-level information. We worked only with province-level data to create the line graphs in this report.



#### **Special Needs Designations**

Table 1 below describes each of the 12 designations the BCMED routinely tracks, with its corresponding designation or "letter" code, description, funding level, and incidence rate. For example, Code A refers to Physically Dependent, which has Level 1 Funding, and has Low Incidence. Table 1 also includes an "All" grouping (Code Z), in which we combine all 12 designations together.

**Table 1: BC Ministry of Education's Special Needs Designations** 

Code	Description	Funding Level	Incidence
Α	Physically Dependent	Level 1	Low
В	Deafblind		
С	Moderate to Severe Profound Intellectual Disability		
D	Physical Disability or Chronic Health Impairment	Level 2	Low
E	Visual Impairment		
F	Deaf or Hard of Hearing		
G	Autism Spectrum Disorder		
Н	Intensive Behaviour Interventions/ Serious Mental Illness	Level 3	Low
К	Mild Intellectual Disability		
Р	Gifted	Basic per-	High
Q	Learning Disability	student	111811
R	Moderate Behaviour Support / Mental Illness		



		allocation only.	
		No supplemental	
		funds.	
Z*	All designations combined (A through R, inclusive)		

**Note 1:** Table format inspired by the <u>BC Teachers' Federation Priorities for Public Education Brief.</u> <u>bctf.ca/publications/BriefSection.aspx?id=46986</u> **Note 2:** Z is a letter code we created as the researchers for the purpose of this report only.

#### **Note about Autism Spectrum Disorder**

With respect to Autism Spectrum Disorder (ASD), there was a change of Provincial policy on January 1, 2004, and of Ministry policy for the 2005/2006 school year -- meaning that, beginning in 2005/2006, students received an ASD designation according to the updated guidelines set out in this Ministry policy manual (https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/inclusive/special\_ed\_policy\_manual.pdf). Prior to the change of Provincial policy, the designation was simply referred to as "Autism", not "Autism Spectrum Disorder".

#### **Public vs. Independent (Private) Schools**

Where possible with respect to the contents of the open data accessible from DataBC, we have presented this information for the whole province, and also separated into public school students and independent (private) school students.



#### **Varying Time Range of School Years**

Some of the line graphs presented in this report have varying time durations of school years. Many designations have information available from the 1996/1997 school year to the present school year, 2019/2020. Other designations, however, have more limited time ranges – such as Designations K and P, which each begin in the 1999/2000 school year. Similarly, Designations Q and R only have information from 2002/2003 onward. Beyond the scope of this report, the reason for this is because of historical recodes to specific designations that are described here (https://catalogue.data.gov.bc.ca/dataset/student-headcount-by-special-needs-category/resource/8910a337-1535-4218-b635-07af626f065c), and which we did not perform for the purpose of this report. Because of the varying time ranges of school years trackable across designations, we present some Designation Z graphs beginning either in the 2002/2003 school year (so as to keep consistent with the time range of the designations with the shortest durations of time available) or in the 2013/2014 school year (so as to keep consistent with the public school/independent school data separation).

#### **2013/2014 School Year**

In many of the line graphs that follows, we have inserted a vertical line at the 2013/2014 school year. This line represents the school year in which the student headcount by designation file allowed for province-level results to be separated into public school students and independent (private) school students. The reason is that 2013/2014 is when the BCMED began requiring student information from independent (private) schools through its 1701 Data Collections (https://catalogue.data.gov.bc.ca/dataset/student-headcount-by-special-needs-category/resource/8910a337-1535-4218-b635-07af626f065c). The "All Students" provincial context graph's source data, however, allowed for public and independent (private) school students to be separated for the entire time duration in the data file.



#### **Masking Rules for Low Sample Sizes**

In accordance with BCMED policy, if the total count of students with a particular designation was nine or fewer, we were required to mask (not display) that designation's results from the report. In contrast, if the designation-specific sample size was 10 or greater, masking was not required and the results could be fully displayed. This requirement had bearing on one data point in the graph for Count of Students with Designation B: Deafblind.

#### **Homeschooled Students**

The BCMED does not include homeschooled students in their student statistics, such as those presented in their open data. Therefore, this report does not include students who are homeschooled.

#### **School Age and Adult Students**

Students who are between the age of 5 years by December 31<sup>st</sup> and 19 years on or after July 1<sup>st</sup> of the current school year are included in the "Grade Range" data file. Adult students (over the age of 19 years) are also included.



#### **Additional Information**

You may find information beyond the scope of this report, such as the processes by which students are assigned special needs designations and fuller descriptions of the funding levels associated with each of the special needs designations, at the following BCMED web sites:

Ministry of Education: Reporting on K-12 Glossary of Terms:

https://www.bced.gov.bc.ca/reporting/glossary.php

**Kindergarten-12 Data Collections:** 

https://www2.gov.bc.ca/gov/content/education-training/k-12/administration/program-management/data-collections

**Special Education Services: Manual of Policies, Procedures, and Guidelines:** 

http://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/inclusive/special\_ed\_policy\_manual.pdf

**Special Education Services Category Checklists – 2010:** 

http://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/independent-schools/se\_cat\_chklst.pdf

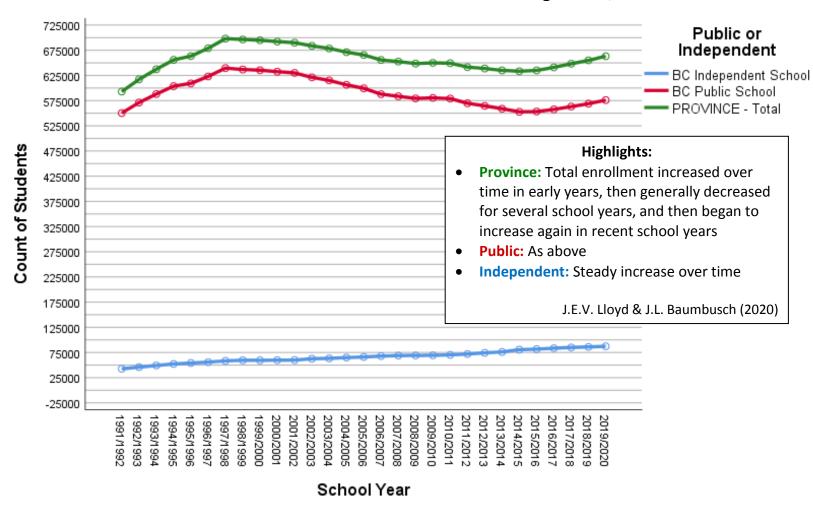
K-12 Funding - Special Needs:

https://www2.gov.bc.ca/gov/content/education-training/k-12/administration/legislation-policy/public-schools/k-12-funding-special-needs



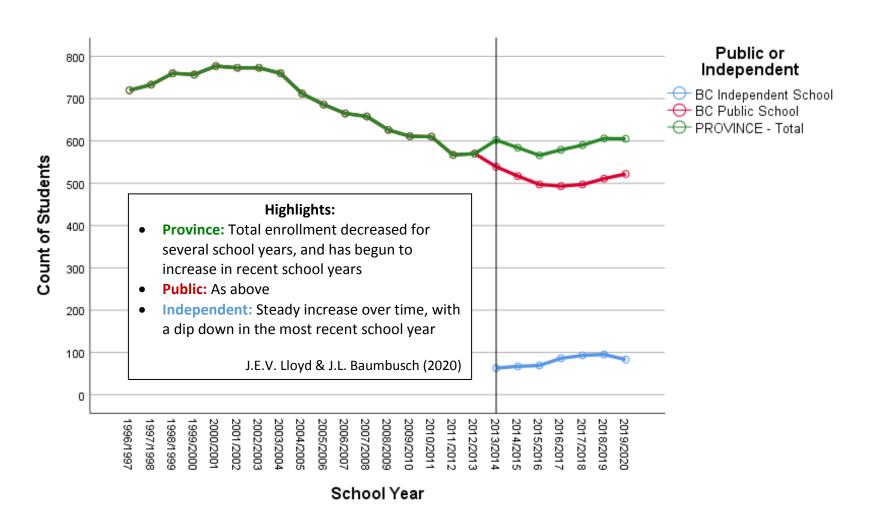
#### **Provincial Context:**

#### Count of All K-12 Students With and Without Designations, Combined



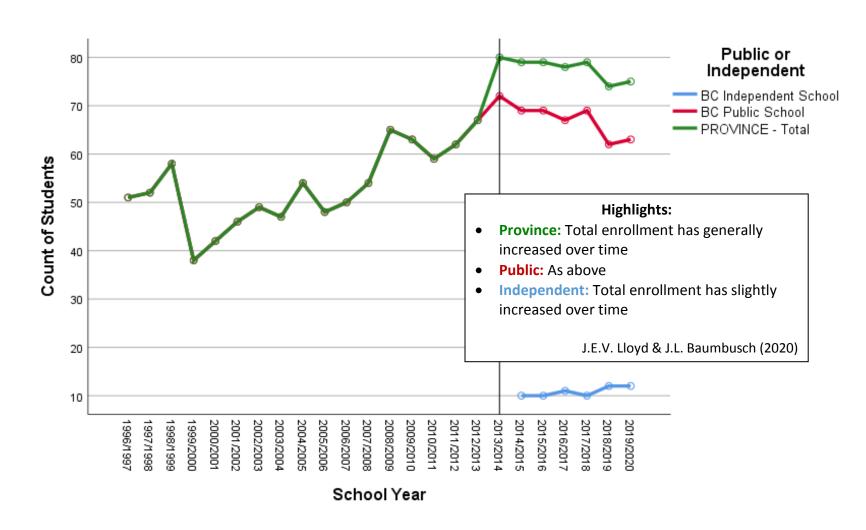


#### **Count of Students with Designation A: Physically Dependent**



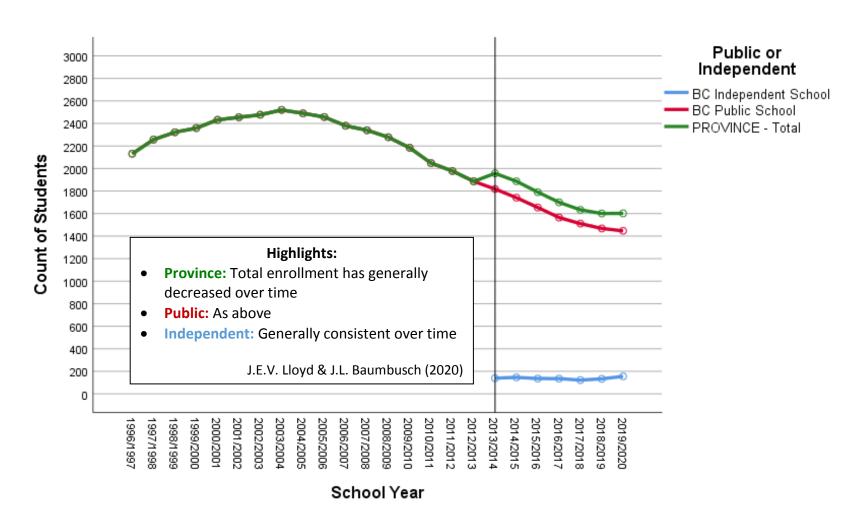


#### **Count of Students with Designation B: Deafblind**



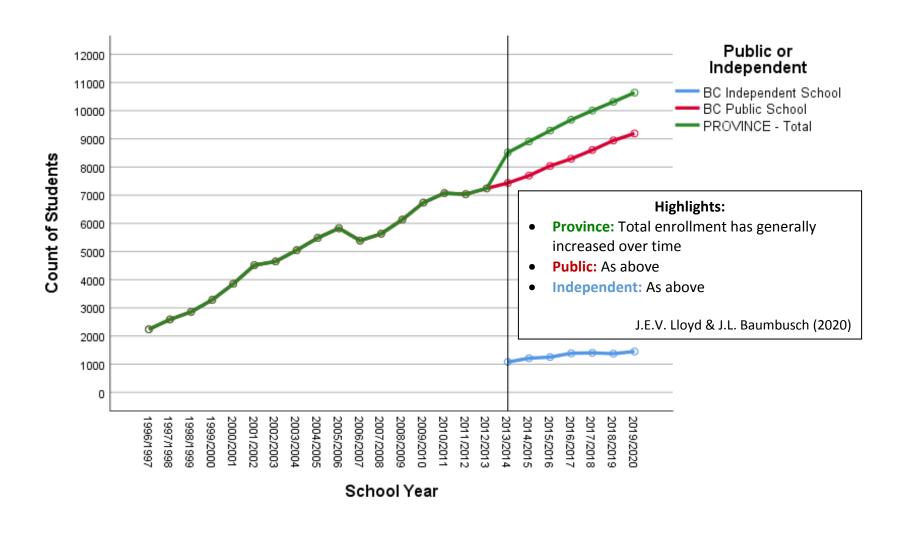


#### Count of Students with Designation C: Moderate to Severe Profound Intellectual Disability



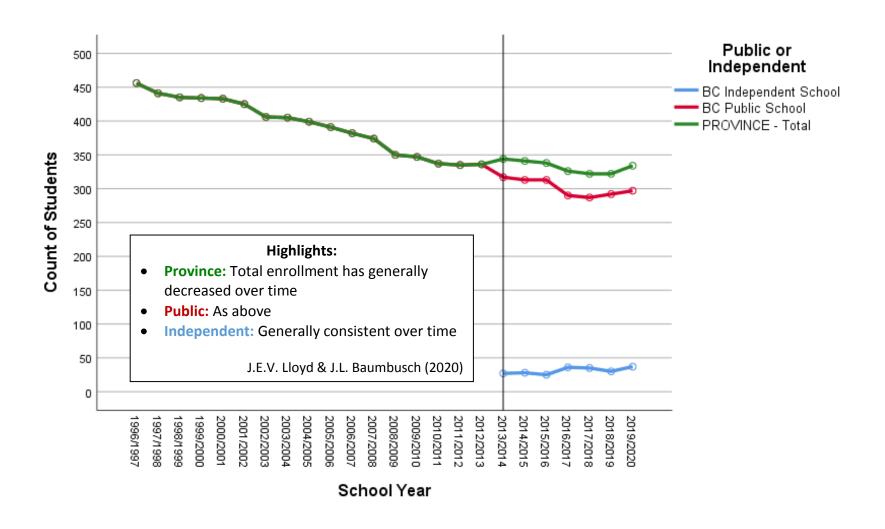


#### Count of Students with Designation D: Physical Disability or Chronic Health Impairment



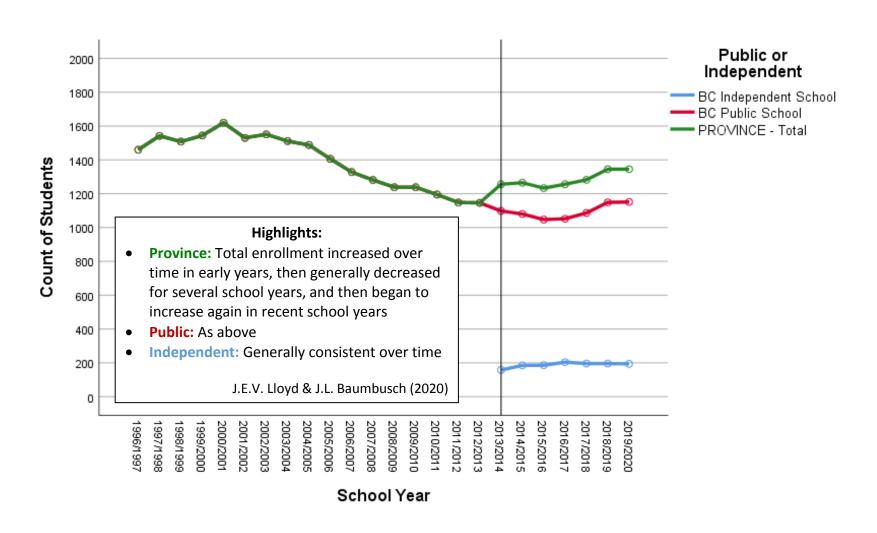


#### **Count of Students with Designation E: Visual Impairment**



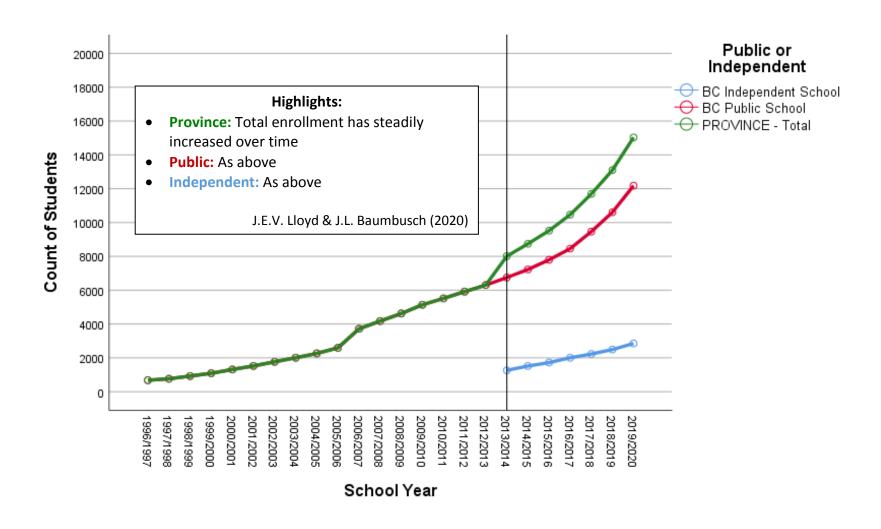


#### Count of Students with Designation F: Deaf or Hard of Hearing



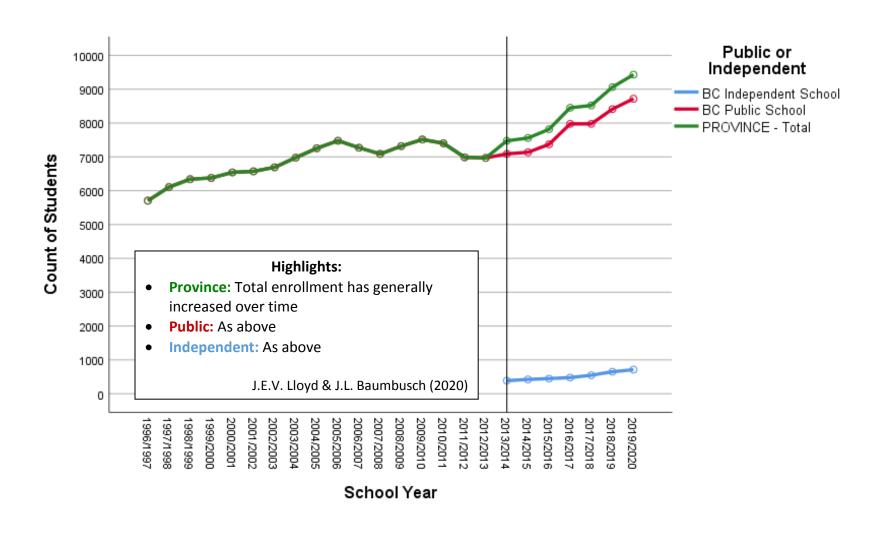


#### **Count of Students with Designation G: Autism Spectrum Disorder**



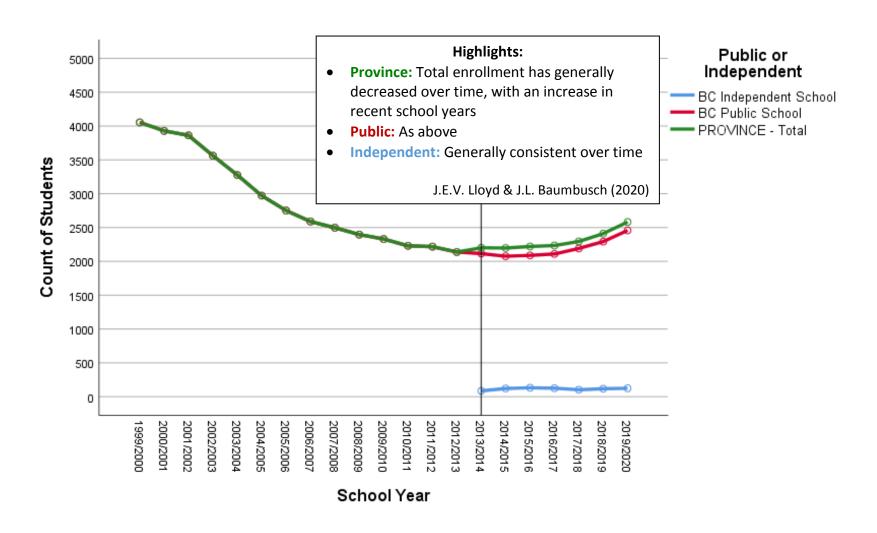


#### Count of Students with Designation H: Intensive Behaviour Interventions / Serious Mental Illness



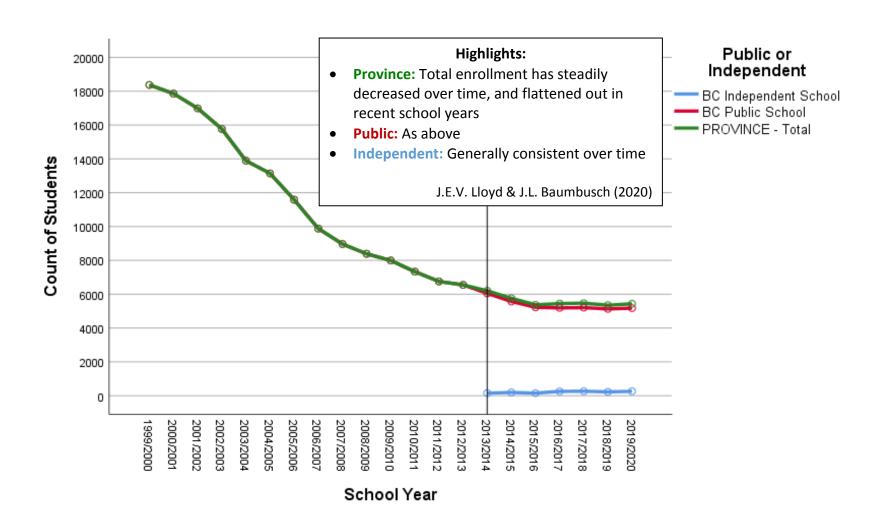


#### Count of Students with Designation K: Mild Intellectual Disability



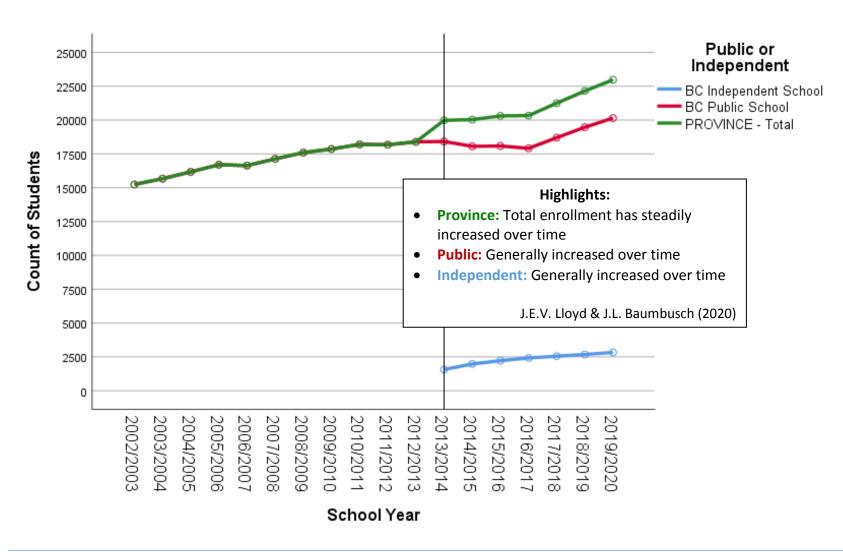


#### **Count of Students with Designation P: Gifted**



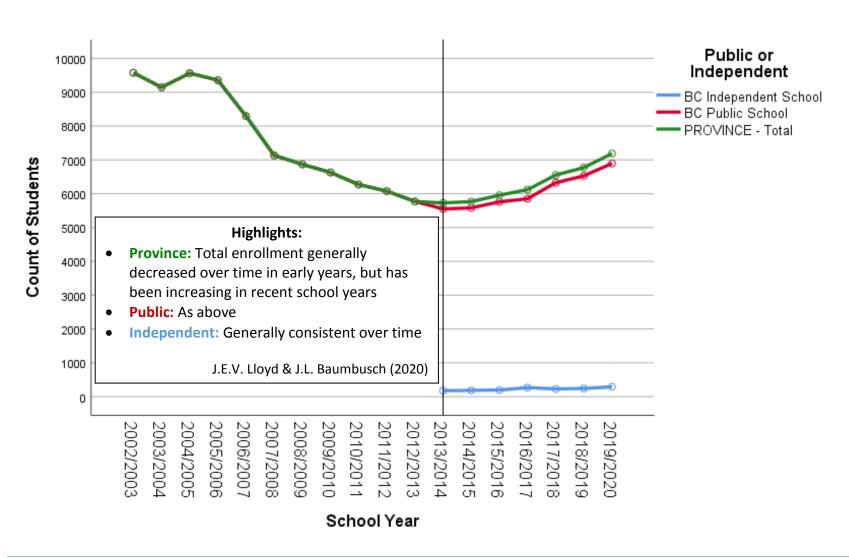


#### Count of Students with Designation Q: Learning Disability



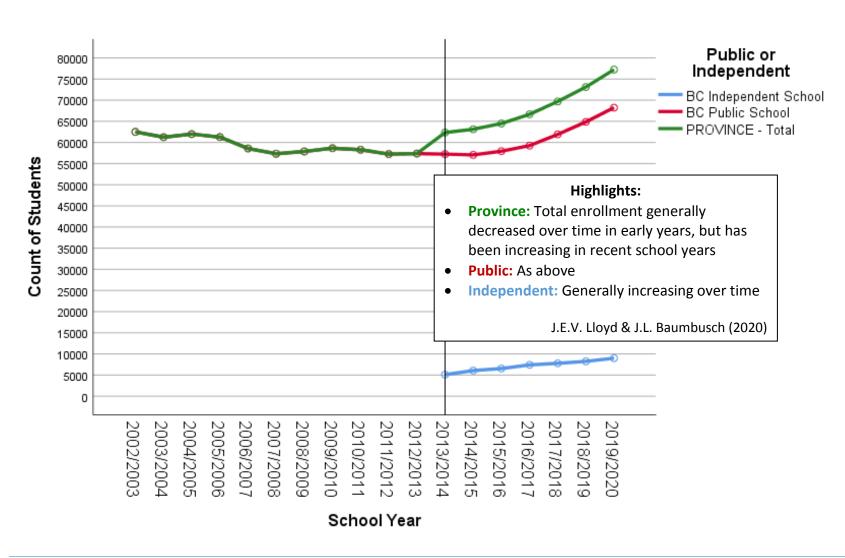


#### Count of Students with Designation R: Moderate Behaviour Support / Mental Illness



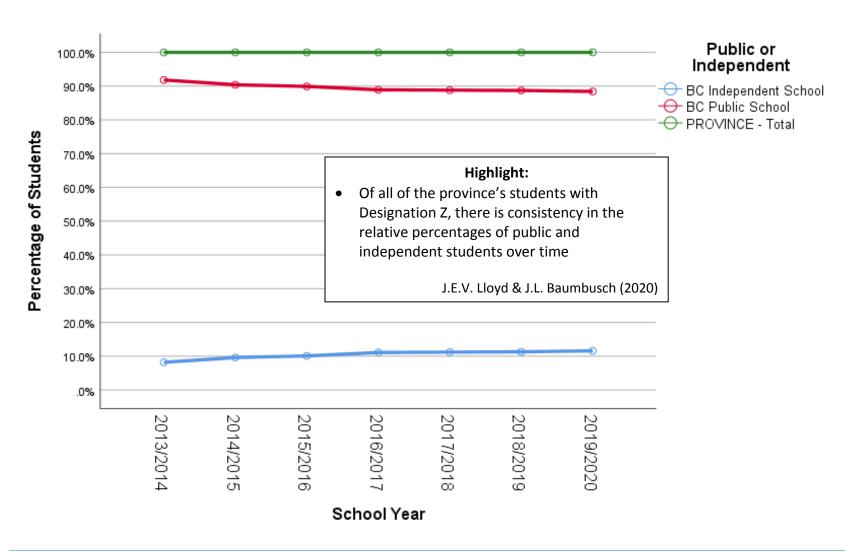


#### Count of Students with Designation Z: All Designations, Combined



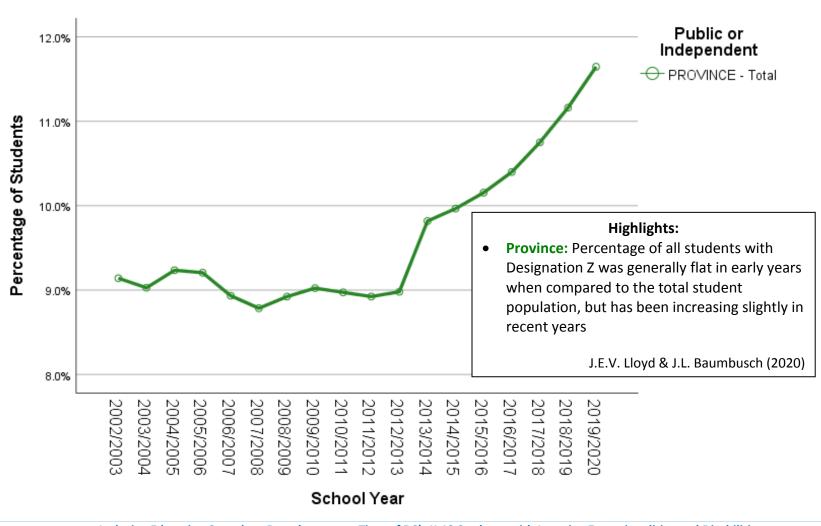


#### Relative Percentage of Public/Independent Students with Designation Z



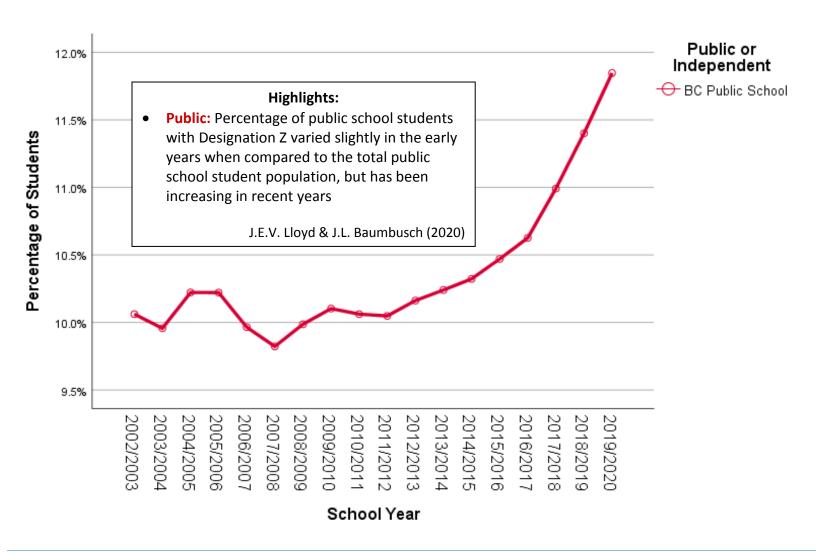


#### Percentage of All Public/Independent Students with Designation Z Relative to All Public/Independent Students



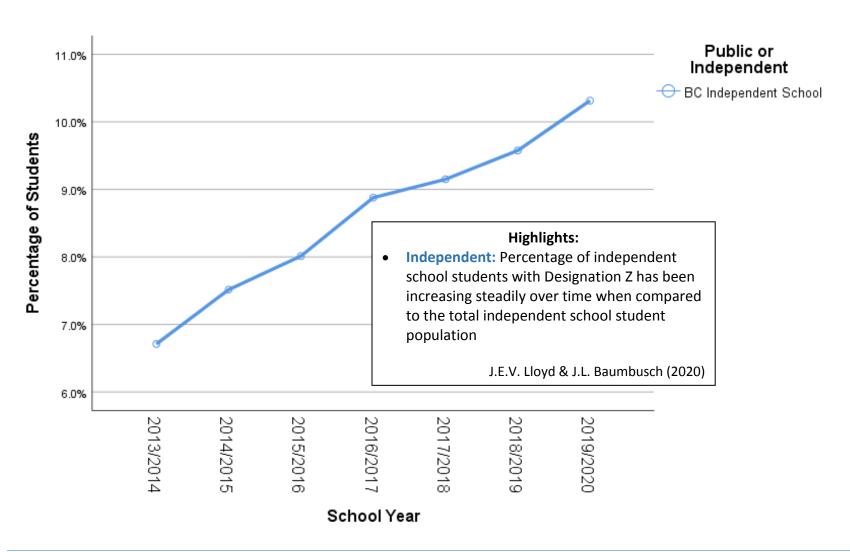


#### Percentage of All Public School Students with Designation Z Relative to All Public School Students





#### Percentage of All Independent School Students with Designation Z Relative to All Independent School Students





#### **DataBC Mandate**

#### DataBC

DataBC encourages and enables the strategic management and sharing of data across the government enterprise and with the public. It is responsible for the <u>BC Data Catalogue</u>, the <u>Open Data initiative</u> and the <u>B.C. Spatial Data Infrastructure</u> and associated products and services.

Access to trusted, high quality data is essential for the success of British Columbia - expressed in effective government decision making, a robust economy, and improved well-being for all of its citizens.

The BC Data Catalogue provides the easiest access to government's data holdings, as well as applications and web services. Thousands of the datasets discoverable in the Catalogue are available under the Open Government License - British Columbia.

The province's area, varied topography and predominantly natural resource based economy has positioned B.C. as a leader in geographic information management and generates a wealth of geographic information that is discoverable in the BC Data Catalogue. DataBC provides access to this information through a suite of unique applications and services that comprise the B.C. Spatial Data Infrastructure.

### The Role of DataBC in B.C. Government Data Management

DataBC is focused on managing B.C. Government data as a strategic asset that meets the needs of citizens, businesses, ministries and the broader public sector. It is responsible for encouraging and facilitating the B.C. Government data management model, expressed in the Data Custodianship Guidelines, and is also a key agent for sharing data, providing value-added services, e.g., Open Data Policy and the B.C. Spatial Data Infrastructure, and advising government data-related initiatives.

#### **Excerpts from:**

https://www2.gov.bc.ca/gov/content/data/about-data-management/databc



#### **Acknowledgements**

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Dr. Erika Cedillo, Director of Public Policy, InclusionBC Tracy Humphreys, Founder and Chair, BCEDAccess Karla Verschoor, Executive Director, InclusionBC

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Twitter: @InclusiveEdn

#### Report available at:



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