

PARTNERS IN EDUCATION

**CAREER
AWARENESS
INITIATIVES
2018-2023**

**SCHOOL
DISTRICT**



**NECHAKO
LAKES**



centerra**GOLD**



INTRODUCTION

School District No. 91 (Nechako Lakes) gratefully acknowledges that we live, work, and play on the unceded, ancestral territories of fourteen First Nations representing the Dakelh, Nedut'en and Wet'suwet'en peoples.

School District No. 91 Career & Trades Programs along with our 'Partners in Education' strive to continually provide all our students 'Real and Relevant' career awareness opportunities. Partner funding creates and expands educational programming that greatly enhances our ability to connect students with local and regional partners.

APPLIED SKILLS

Applied skills are a broad set of knowledge, skills, work habits, and character traits believed to be critically important to success in school and beyond. These include hands-on skills like carpentry or machine works, as well as skills related to careers in health and environment.

TECHNOLOGY SKILLS

Technology skills are a broad set of select and appropriate tools/technologies that extend students' capability to understand and relate to mechanical, information technology, mathematical, or scientific tasks. Some examples include knowledge of programming languages, mechanical equipment, or tools.

WATERSHED SKILLS

Watershed skills cover a broad range of educational outcomes that relate to the technical, social, environmental, community and First Nations interactions within the Nechako Watershed. Students gain greater understanding of the many facets that encompass a watershed.

LEGEND

PROGRAM TITLE

30

S

1Y

★

Number of students that the program has served

E = Elementary Students
S = Secondary Students

Number of years Centerra funding has supported this program

Programming Discipline(s)

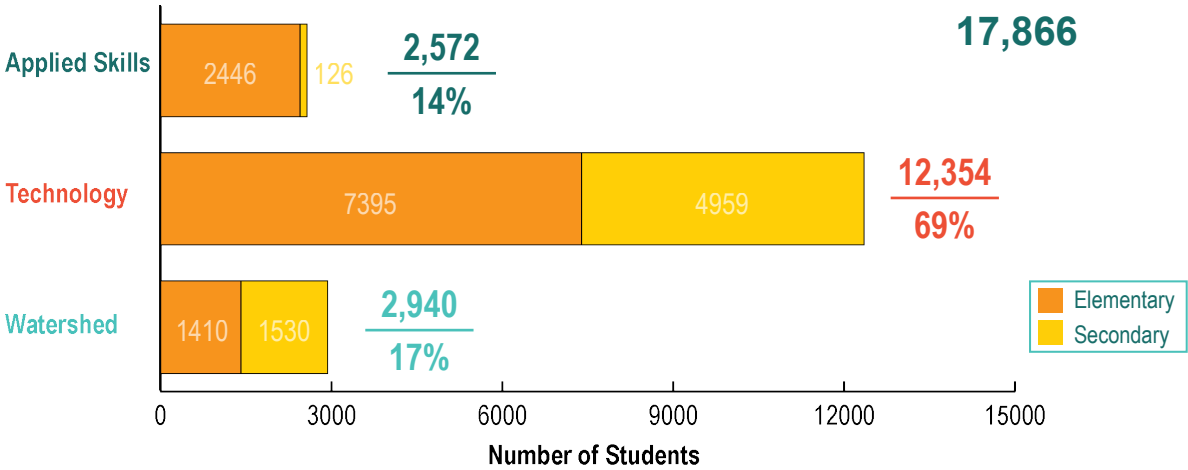
New Project since Centerra support

2

Number of students in Elementary and Secondary that participated in Centerra funded programming for each of the three program disciplines.

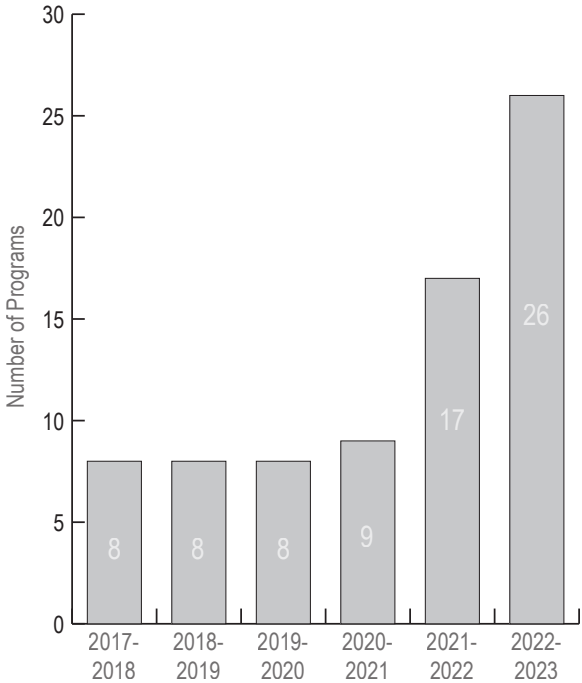
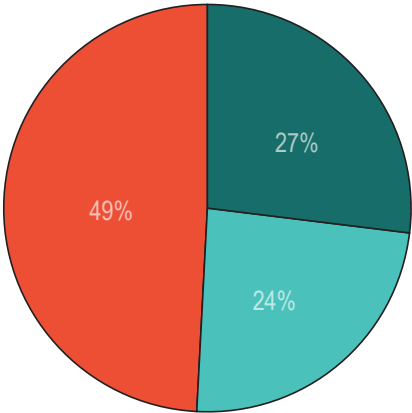
Total Students 2017-2023

17,866



Number of programs funded in whole or part by Centerra.

Percent of Centerra funding to the three program areas.



WL MCLEOD FARM TO SCHOOL WALK-IN COOLER PROJECT

275

E

1Y



This walk-in cooler project has been many years in the making with many partner organizations and funders involved. This cooler will provide regulated cold storage space for WL McLeod School for years to come. The cooler is another key component of the WL McLeod Farm to School Program that grows over a hundred kilograms of vegetables each year that are in the school's meal programs (breakfast, lunch and weekend meals for families). With the addition of the cooler, the school now has the capacity to store enough food to be able to cook homemade lunches for neighbouring schools that don't have a regular meal program.

Students are involved in every step of the WL McLeod Farm to School Program, from sowing the seeds in the garden that is located in partnership with the Vanderhoof Community Garden, to harvesting, storing, cooking, and serving meals. Students learn skills that will help them become food secure now and into the future.



The WL McLeod Farm to School Program started in 2011 with a single salad bar and has grown through partnerships such as the one with Centerra, to be a diverse, multi-level educational and applied skill building program that has provided a safe and healthy learning space for over 2,000 students. The WL McLeod Farm to School Program is one of several school meal programs in the province that will be used as a template for other schools to follow. With food insecurity so widespread, we are proud that the WL McLeod Farm to School Program model will be shared province wide to help build a food secure future.

The WL McLeod Farm to School Program isn't stopping. It is continually looking to the next steps to expand the program further, to impact more students, and to involve more community partners. All this to strengthen the community as a whole.

LEFT - THE RIBBON CUTTING OF THE WL MCLEOD FARM TO SCHOOL WALK-IN COOLER. STUDENTS, EDUCATORS, COMMUNITY PARTNERS, AND FUNDERS WERE ALL IN ATTENDANCE.

RIGHT - STUDENTS HARVEST VEGETABLES, DESTINED FOR THE COOLER, FROM THE SCHOOL GARDEN AT THE VANDERHOOF COMMUNITY GARDEN SPACE.



BID CONNECT

24

S

2Y



BID Connect provides students direct hands-on exposure to careers in the mill fabrication sector. The students engage with employees on the floor, chat with the management team and are encouraged at the end of the day to complete and submit an application under the supervision of the HR Department.

CANFOR CONNECT

36

S

2Y



Students recreate the restaurant experience for parents, community members, and honored guests. Two class groups work collaboratively to develop a menu and food preparation plan. Then over two days students prepare and serve these food items to guests – recreating all the moving parts associated with running a food service establishment.



**IN THE CONNECT PROGRAMS
STUDENTS WORK HANDS-ON
IN A VARIETY OF INDUSTRIES
IMPORTANT TO THE NORTH AND
GAIN INSIGHT INTO FUTURE
CAREER OPTIONS.**



NATURAL RESOURCE MINISTRIES CONNECT

18

S

1Y



NRMC provides students with direct hands-on exposure to careers in the natural resource management sector. The students engaged with employees at their place of work, listened to presentations from the management team, and experienced a field day of hands-on activities. Students were exposed to riparian zones, plant identification, road engineering, enforcement, geology, fire science, and environmental monitoring.

Centerra support
of Applied Skills
Programming

3 existing and
8 NEW Programs

2,572 students
over **6 years**

2,446 Elementary
Students

126 Secondary
Students

APPLIED SKILLS



FSJSS ICE RESCUE PROGRAM

36

S

3Y



The Fort St. James Secondary School Ice Rescue Program is offered to a select number of students. The intensive program provides direct hands-on learning in challenging realistic conditions. Upon completion, students receive their Ice Rescue Certification. The certification adds immense capacity value to local Search & Rescue organizations and support to first responder organizations.



LAKE FOCUSED PROJECTS OFFER EXPERIENCES AND CAREER OPTIONS RELEVANT TO OUR REGION.

PROJECT LAKE

12

S

1Y



Project Lake is a three-day career awareness event that provides students with hands-on exposure to activities related to outdoor tourism. These presentations range from sharing by conservation officers, learning to create fly-ties, prepare fish for consumption, and to fly-cast, understanding water safety, and experiencing career opportunities in outdoor tourism.



CARL CARS INITIATIVE

660

E

6Y

Carl Cars engages over one hundred and twenty elementary students each year from throughout the school district in the finer arts of car design and racing. Students design and construct their respective cars in the weeks before the annual race day held at Evelyn Dickson Elementary School. Classes are bussed in from throughout the district to race against fellow students over a day of fun and learning.

CAFE 346

45

E

1Y



Students recreate the restaurant experience for parents, community members, and honoured guests. Two class groups work collaboratively to develop a menu and food preparation plan. Then over two days students prepare and serve these food items to guests – recreating all the moving parts associated with running a food service establishment.



CARL CARS - A LONG LINE OF STUDENTS TEST THEIR CARS ON THE FAMOUS RAMP.

CAFE 346 - THE SET-UP AND SERVERS OF THIS FUN CAFE.



APPLIED SKILLS

PROJECT BOAT FLOAT

360

E

6Y

Project Boat Float provides students the opportunity to design, build, and float a boat in a collaborative setting with fellow classmates. Utilizing predetermined materials, class teams proceed to create a boat that will carry one passenger for the longest period prior to sinking. The water bladder system provides a safe and controlled environment for fun and learning to take place.



WATER ROCKET LAUNCH PROGRAM

26

E

1Y



The Water Rocket Launch Program (WRLP) allows students to develop basic skills associated with the design, construction, and launch of simple water powered rockets. The WRLP Kits are available to school sites/teachers looking to deeper explore the engineering, math, aerodynamics, and laws of motion principles in a hands-on, interactive, and fun fashion.



PROJECT SIMPLE MACHINES

1080

E

6Y

Project Simple Machines with the support of the District Applied Skills Design and Technology trailer provides students the opportunity to design and build a simple machine in a collaborative setting with fellow classmates. The school wide initiative culminates in an open house for parents and invited guests to view the many and varied student creations.

PROJECT SIMPLE MACHINES IS ALL ABOUT IMAGINATION, MATH, CONSTRUCTION, TRIAL AND ERROR, AND LOTS OF HARD WORK AND FUN!



APPLIED SKILLS

LIVE-IT: LIVE STREAMING

Live-It is a live-streaming business that offers experiential educational opportunities to rural and remote schools. There is a wide variety of live-streaming and interactive learning sessions available for educators, as well as entire schools, in which to participate. Because of continued funding, this program scope has expanded to cover new areas that support reconciliation.

AUGMENTED REALITY - FIRST NATION ELDER WELCOME

4500

E/S

1Y



In the spirit of the reconciliation journey, SD91 is proud to have partnered with *Live-It* to create a series of Territorial welcomes at the entry to every facility in the School District. These were created by students with deep input from local Elders. Using a cell phone, visitors, staff, and students are welcomed by a local Elder speaking in their traditional language. Viewers experience the welcome in an augmented reality environment.

CHIEF KW'EH

4500

E/S

1Y



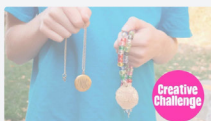
SD91 partnered with *Live-It* to create a multi-media educational program centered around the life and journey of Chief Kw'eh. Graphic & Media Arts students from SD91 supported the development of the production in the form of interviewing, filming, and editing the work. The production has since been added to the extensive line-up of multi-media educational content at *Live-It*. SD91 students have developed new and deeper skills and are now able to create even more local content based on the new skill sets.

The screenshot shows the Live-It website interface. At the top, there is a pink navigation bar with the 'LIVE IT.' logo on the left and 'Help' and 'EN' with a dropdown arrow on the right. Below this is a white navigation bar with links for 'Programs', 'Resources', 'Calendar', and 'Collections'. On the right side of the white bar are icons for search, notifications, and a user profile. The main content area features a large background image of a forest and a lake. Overlaid on this image is the title 'Chief Kw'eh | How can one ancestor influence a whole community?' in large white text. Below the title is a paragraph of text: 'Did you know there once lived a great chief who influenced the lives of his people for generations? In this show, we'll be learning about Chief Kw'eh's life and story from Indigenous knowledge holders, how he influenced the lives of the Nak'azdli Whut'en, and why stories like his are important to learn about and share!'. At the bottom of the content area are two buttons: a pink 'Start Show' button and a white 'Watch Trailer' button, followed by a circular icon with a plus sign.

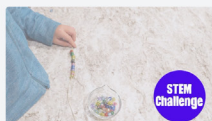
LIVE-IT - FIRST NATION WELCOME POSTERS SIMILAR TO THIS ONE CAN BE FOUND IN ALL SCHOOL DISTRICT BUILDINGS. USE YOUR PHONE TO LISTEN TO FRED SAM WELCOME YOU TO THE SCHOOL IN THE DAKELH LANGUAGE TO WELCOME YOU AT THE FRONT DOOR OF ALL SCHOOLS IN FORT ST. JAMES.



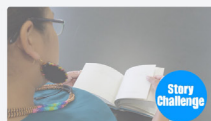
Challenges



Chief Kw'eh | Community Creative Challenge



Chief Kw'eh | Community STEM Challenge



Chief Kw'eh | Community Story Challenge

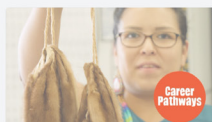


Chief Kw'eh | Community Game Challenge

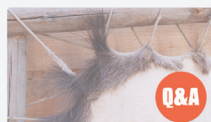
Explore



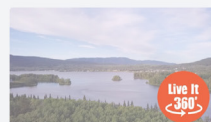
Chief Kw'eh | Community Deep Dive



Chief Kw'eh | Community Career Pathways



Chief Kw'eh | Community | Q&A



Chief Kw'eh | Community Live It 360

AUGMENTED REALITY SANDBOX

2100

E

6Y

The Augmented Reality Sandbox is a highly interactive geology tool for elementary students. A mobile unit with cutting edge technology built “in-house” at SD91 allows students to manipulate the landscape and visually realize the impacts of change in terms of weather, geography, and geology.



BEE BOTS

600

E

6Y

The Bee Bots Program provides K-1 learners the ability to learn and implement basic programming language. Students program the Bee Bots to perform stop and move functions in a variety of environments ranging from the classroom floor to elaborate floor mazes.



LEARN TO DRIVE: DRIVING SIMULATOR

120

S

1Y



The Learn to Drive: Driving Simulator (LTDDS) provides students equitable access to a 'learn to drive' training aid in a controlled environment. Students learn vehicle handling and traffic law basics in urban and non-urban environments – these environments can be programed with a variety of weather conditions. Driving is assessed by the software program and provides feedback to the student and teacher.

**LEARN TO DRIVE SIMULATOR
HAS PROVEN SUCCESSFUL FOR
STUDENTS WHO ARE LOOKING
FOR THIS EXPERIENCE.**

Centerra support
of Technology
Programming

2 existing and
7 NEW Programs
12,354 students
over **6 years**

7,395 Elementary
Students

4,959 Secondary
Students

TECHNOLOGY SKILLS





**APPLIED TECHNOLOGY
TOOLS GIVES STUDENTS THE
OPPORTUNITY TO BE CREATIVE
AND BUILD PRACTICAL SKILLS.**



DRONE PROGRAM

96

S

6Y

The FSJSS and NVSS Drone Programs provide students with real world, hands-on experiences and drone flight certifications. The size and sophistication of drones has changed dramatically over the years; and, the programs have evolved in step with these many changes. Students apply skills that are used by private and public sector operators in addition to providing in-house drone support to a variety of school district initiatives ranging from wetlands mapping to sturgeon stock assessments.

3D PRINTER FARM INITIATIVE

390

E/S

1Y



The 3D Printer Farm Initiative is adding much needed production and flexibility capacity to graphic and media arts programs throughout the district. The initiative allows students to create and produce larger and more complex multi-piece projects in addition to reducing wait times for small to mid-sized projects. Students in graphic/media arts programs collaborate with their peers to intricately colorize many of these projects.



SD91@MICROSOFT

24

S

2Y



SD91 has partnered with Microsoft (Vancouver) to provide students the opportunity to directly observe and interact with its employees and managers. Students can chat and work with programmers, web-designers, developers, and data scientists in a workplace purpose built for the digital work environment.

SD91@SFU@SIAT

24

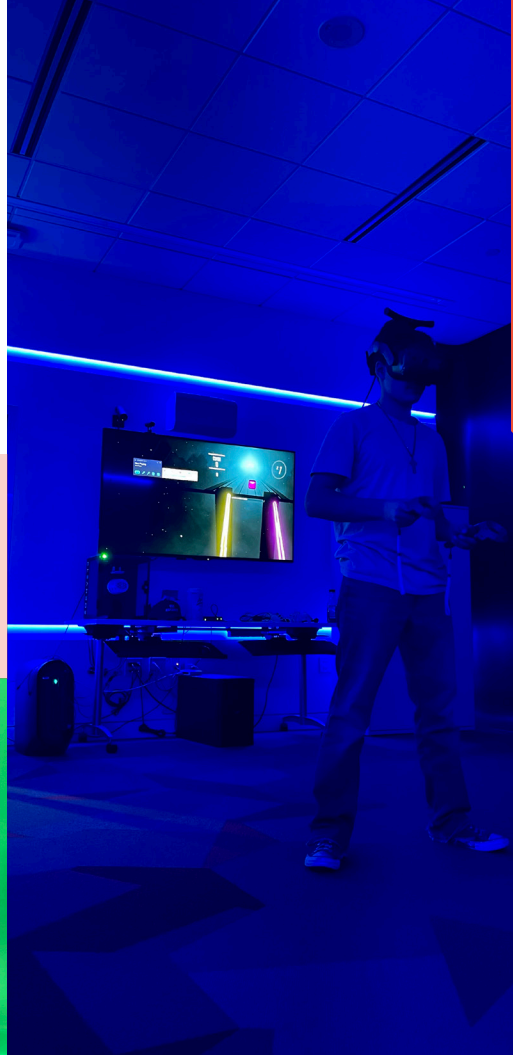
S

2Y



SD91@SFU@SIAT provides students the opportunity to take a deep dive into the world of graphic design and its many iterations. The School of Integrated Arts & Technology at Simon Fraser University has partnered with SD91 to allow students direct access to their faculty, students, and programs. This is reciprocated with faculty and students coming to SD91 to interact with elementary and high school students.

**SD91@MICROSOFT (RIGHT) & @
SFU@SIAT (BELOW) OFFER TRULY
UNIQUE EXPERIENCES INTO THE
WORLD OF TECHNOLOGY.**



TECHNOLOGY SKILLS





SCIENCE & SELECTIVE FISHING PLATFORM

24

S

2Y



The Science & Selective Fishing Platform (SSFP) is a multi-year development partnership between School District 91, Nak'azdli Whut'en, and RiverTrap Systems. Students were afforded hands-on access to the design, fabrication, and final additions of the platform. Upon completion, students and our area 'Partner in Education' experts will utilize the platform to conduct water-based science activities in several different lake and/or river-based watershed systems. In addition, the platform is designed to have a selective fishing capability that will further enhance its functionality for students and community partners. The SSFP will increase students' hands-on access to conduct a broad range of educational activities in addition to making deeper connections with local knowledge holders and area experts.

SSFP - STUDENTS INVOLVED IN HANDS-ON CONSTRUCTION AND FABRICATION OF THE BOAT, AS WELL AS LEARNING TECHNICAL AND RESEARCH SKILLS FROM THE PONTOON IN OPERATION.



WATERSHED SKILLS

KOH LEARNING INITIATIVE - STREAMKEEPERS

720

E/S

6Y



The KOH Learning Initiative is an ongoing educational partnership between UNBC and SD91. The KOH Learning Initiative with SD91 students and staff perform a variety of activities throughout the school district related to stream monitoring, data collection, and rehabilitation.



KOH LEARNING AT THE REDMOND WETLAND EDUCATION CENTRE OFFERS A DIVERSITY OF OPPORTUNITIES FOR LEARNING AND PARTICIPATING IN WATERSHED RESEARCH.

TRU INTEGRATED LAB

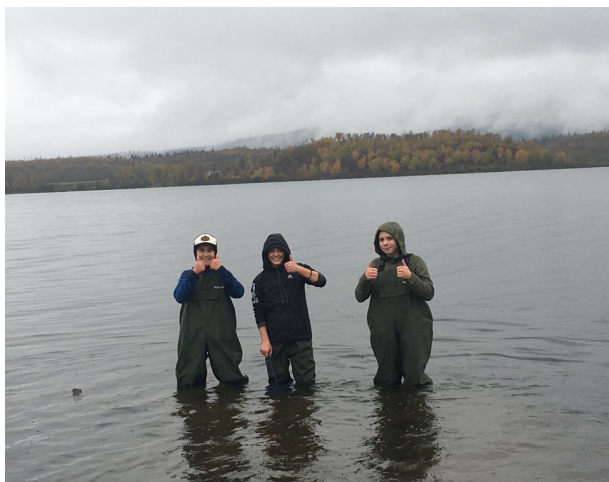
96

S

6Y



This program is a partnership with Thompson Rivers University (TRU) where laboratory level water and/or soil sample testing is facilitated remotely between SD91 schools and TRU.



Centerra support
of Watershed Based
Programming

2 Existing and

4 NEW Programs

2,940 students

over **3 years**

1,410 Elementary
Students

1,530 Secondary
Students

**TRU INTEGRATED LAB
BRINGS TOGETHER
SCIENCE AND TECHNOLOGY.**



WATERSHED SKILLS

WL MCLEOD WETLAND EDUCATION CENTRE

400

E/S

2Y



The WL McLeod Wetland Education Centre will be developed over the next two years. Working with our many 'Partners in Education' the project will develop an interpretive, educational trail system with a virtual component within a naturally occurring urban wetland inside the municipal boundary of Vanderhoof, BC. The wetland is situated next to the Nechako River and two schools, making it an excellent showcase for school and community-based education and awareness. The interpretive trail would be accessible locally to K-12 students from Vanderhoof and Saik'uz First Nation, CNC students, community residents, and tourists. The virtual component – creating a virtual digital resource of the wetland – will be accessible by all students across SD91 in addition to the general public.

REDMOND WETLAND EDUCATION CENTRE

800

E/S

2Y



The Redmond Wetland Education Centre is being actively developed into a regional learning space. The site provides hands-on learning activities for students from K to 12. The active eco-system provides a broad range of educational activities for teachers and students. Low impact trails, movable picnic tables, and a storage facility for educational resource washrooms have been built and installed by students to date. Additional add-ons such as a solar power array and washrooms are in the works. The use of the site is rapidly expanding year over year.

NANCY & RICHARD MARTENS EDUCATION CENTRE

900

E/S

2Y



The Nancy & Richard Martens Education Centre site provides hands-on learning activities for students from K to 12. The site has an active stream surrounded by a wooded area that provides a broad range of educational activities for teachers and students. The structure (working with local contractors) and interior add-ons such as the metal stove were constructed by area students. Low impact trails, storage facility for educational resource, and washrooms have also been installed by students to date. The use of this site is also expanding year over year.



**MCLEOD WETLAND
WILDLIFE VIEWING
PLATFORM**

**NANCY & RICHARD MARTENS
EDUCATION CENTRE IS
SITUATED ALONG CLEAR CREEK**

REDMOND WETLAND

WATERSHED SKILLS

“Making Education Real & Relevant”

ADST APPLIED DESIGN

**SCHOOL
DISTRICT**

91

**NECHAKO
LAKES**

School District No. 91 (Nechako Lakes)

P.O. Box 129

Vanderhoof, BC Canada, V0J 3A0

Phone: 250-567-2284 Fax: 250-567-4639

Career & Trades Programs

Email: dcarpenter@sd91.bc.ca

www.sd91.bc.ca

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