





# How one teacher partnered with SMART to deliver a virtual coding curriculum unit

# Challenge

The field of Computer Science evolves rapidly, making it difficult for educators and curriculum writers to keep up and provide relevant, timely resources. Also, teaching and learning over the past 18 months occurred largely in a virtual setting in response to the COVID-19 pandemic. Despite these obstacles, the goal remains the same for Computer Science teachers—teach topics such as coding.

# Why SMART?

Ben Ryan, Grade 6 Homeroom Teacher at Bearspaw School in Calgary, Alberta, partnered with Kelsey Hanson, a former teacher and current web developer at SMART, to see if coding curriculum could be taught entirely virtually to grade 6 students.

Kelsey created a "Code Club" curriculum unit by combining open-source practice tools Scratch and Raspberry Pi with Lumio, SMART's cloud-based lesson creation and delivery software. Each Lumio lesson featured the day's curriculum, coding instructions, and examples of coding. Students joined each Lumio lesson during weekly Zoom meetings, and each Lumio lesson link was made available to students for review and reference independently throughout the week. They could practice longer or be even more creative with coding in their free time.

## **School**

Bearspaw School, Calgary, Alberta Brad Walls, Principal Ben Ryan, Grade 6 Homeroom Teacher Kelsey Hanson, Web Developer

## Challenge

To keep students engaged while learning coding in a virtual setting.

#### **SMART Solution**

Lumio by SMART

#### **Outcome**

Successful delivery of a nine-week Zoombased virtual coding curriculum unit and positive student experiences.

### **Outcome**

The Code Club curriculum unit spanned nine weeks, with one Zoom meeting per week. The first five meetings featured lessons delivered with Lumio, leaving the remaining four meetings for independent, supported creation time and final project presentations. At the start of each meeting, Kelsey used Lumio's Shout It Out! activity to gather students' submissions of at least one text-based contribution that showed what they learned and remembered from the last time. Students had additional support through several other technology experts who joined each call. This gave Kelsey and Ben the opportunity to create virtual breakout rooms to address specific learning concerns.

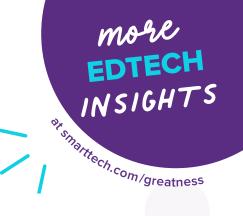
To measure success, Kelsey and Ben administered a short two- or three-question formative assessment at the end of each lesson via Lumio's Response activity, which automatically graded students' responses and provided personalized feedback. They also asked students to complete an anonymous "Student Experience" survey, which showed that approximately 75% of students found Lumio lessons were more engaging than non-Lumio lessons, and approximately 90% found Lumio lessons easy to access.

According to Ben, "The whole program was a success as the students found it challenging and fun to learn. Kelsey and her team were so open and willing to help each and every student with whatever they were working on."

Let's learn together.
#WeAreSMART

Interested in thought leadership from SMART?

Check out edblog.smarttech.com



The whole program was a success as the students found it challenging and fun to learn. Kelsey and her team were so open and willing to help each and every student with whatever they were working on.

- Ben Ryan

#### **About SMART**

**SMART Technologies** is a world leader in simple and intuitive classroom technology solutions. We are an innovator in software and interactive technologies that enable natural collaboration, helping every student and teacher discover and develop their greatness.

To learn more, visit **smarttech.com**. Contact us at **smarttech.com/contact**.

Do you have a SMART story? Tell us at ImplementationTeam@smarttech.com

