

NEW CODING CONTENT TO AUGMENT EXISTING MATH RESOURCES

Engaging learning experience helps motivate students



AT A GLANCE

Challenges

- Needed solution to combine coding into existing math content
- Activities needed to be easy-to-follow and engaging

Benefits

- Math and coding content were consolidated into one resource
- More Engaging Learning Experience
- Motivating for Students



"Logics was instrumental in assisting us to create this unique content where students can engage with our existing math resources online and at the same time, access coding activities. We look forward to rolling this program out in full in the Fall and expanding it further down the road."

Tyler Huculak

Founder, Dynamic Classroom

THE CHALLENGE

Dynamic Classroom creates and publishes educational math resources for grades 3 to 12 and they needed support in augmenting these with coding content. Many provinces are adding coding to the math curriculum strands for students to develop specific skills like computational thinking while learning fundamental coding concepts. Dynamic Math books are aligned by province, and coding activities were required to complement the existing math lessons for grades 3 - 9, specifically in Ontario. They needed to stay true to the existing style of clear and concise math explanations that can be used at home or in the classroom and are also engaging.

THE SOLUTION

Logics Academy's Learning Experience Design team, who consist of teachers and technology experts, are leaders in creating unique coding programs and activities that appeal to both educators and students. For this project, they designed and developed sequential coding activities (using Scratch) that supported the math lessons in each of the Dynamic Math books by grade.

This included creating student-facing interactive videos with specific instructions to help guide them through the completion of the math books' content. The coding activities were fun and interactive in nature and students were tasked to use their mathematical and computation thinking skills to complete certain challenges in a scaffolded-learning approach.

THE RESULTS

The new coding activities were created in the Spring of 2022 to enhance the coding content in the Dynamic Math books, and the feedback so far has been very positive. Whether students are new to coding or have previous experience, the activities and videos help solidify student learning of coding concepts through a guided learning approach.