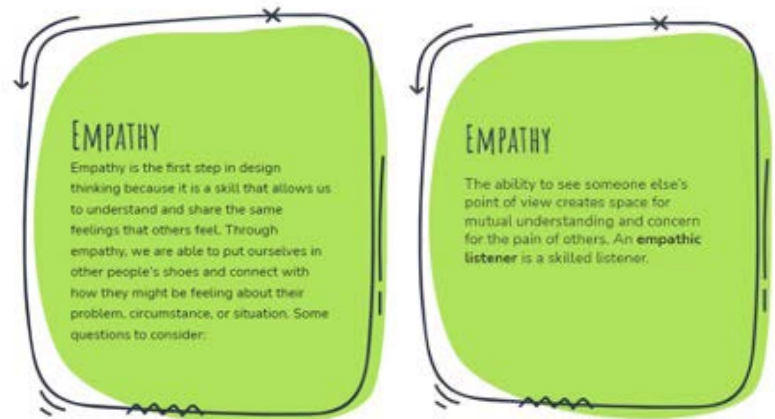


## LYNX for All

### Team Members:

Chelly Persad and Manprit Rai

School District: Peel DSB



## What We Did

We worked in a team of two professionals across two different schools (elementary and middle school). Chelly was able to run an online coding club, where students learned the LYNX platform. The club actually had a student who learned LYNX fairly quickly and he led some sessions for other students. Chelly also taught a group of students empathy and how to build empathy when trying to solve problems in their life and community. Manprit worked with a small group of students from her online grade 4 class who were interested in learning the Lynx platform. She created a coding club whereby students were exposed to the platform and language. They attempted to learn the language and through direct guidance, students were able to create simple codes. Due to Covid-19 school closures and reassignments we changed our plan of action.

- Our team became familiar with coding using Lynx by participating in webinars, as well as by purchasing resources to support our professional development.  
(Some of these resources include the following titles: Mindstorms: Children, Computers and Powerful Ideas, Computational Thinking and Coding for Every Student, Book: Hacking Digital Learning Strategies).
- We explored Lynx using learner mode and looked into existing projects to build our understanding around the program and the primitive language. We referred to the guides that were available on the site.
- We spoke several times amongst ourselves to discuss how we could connect Lynx to the learning that our students would do. This included accommodating for teaching in a virtual environment and we had to adapt our plan and thinking for this (e.g., create slides for primitive language and make use of resources (such as videos)).
- We purchased books to support student learning around coding and computational thinking. These resources were used to help us support a sufficient program where coding was the foundation. Chelly began her reading in the summer to prepare for the upcoming school year. Manprit explored Lynx during the late summer. As the school year went on we continued to purchase resources based on needs and our learning (e.g., computational thinking, the different universal coding language)
- We introduced the students to Lynx and attempted to scaffold the learning, the best we could. This is where we began to pivot away from our original plan due to limitations and the students' response to the LYNX platform (See "What We Learned Section").
- Our initial plan was to focus on teaching our students how to use coding to solve a problem related to their life or use coding to help others in the school (e.g., create a simple program that will help kindergarten students learn the alphabet). We have not yet reached this portion of the plan and are currently progressing towards it by refining our teaching of LYNX.



## What We Learned

### Manprit's Experience

Based on our unique situation this school year, I ran a small club with my grade 4 students who were interested in learning Lynx coding. They had previous knowledge of block coding, from Scratch, and one student also was in the process of learning Java. Their comfort with coding in general was fairly good, however, they had not experienced coding similar to that in Lynx. Through 40-minutes sessions once a week, I allowed students to freely explore Lynx and then began focusing on the language. We worked through simple coding examples of making shapes and how to change the turtle's colour. This took a couple of sessions and through my observations students were having a lot of difficulty with the primitive language. Many of my students are English Language Learners and found the language hard to understand.

From this observation, moving forward I would like to make a visual connection to the vocabulary to make it easier for them to understand. The resources provided by LYNX were text heavy (less visual) and I will continue to focus on the computational language. Being online, I felt restricted in my teaching approaches. Being aware that my students were having trouble with the language, if we were in class, I would have had them do collaborative hands-on activities where they match the codes to visual representations.

Through this experience thus far, I have learned a lot not only about the basics of coding and coding language, but also the critical thinking, problem solving etc., that is of utmost importance. By taking the AQ course and reading the purchased resources, I learned about the varieties of computational language, platforms, theories and applications. I continue to read through the professional resources, engage in rich discussions with colleagues and reach out to various organizations to continue my learning journey. I would like to explore how I can make LYNX an engaging platform using instructional practices, resources I provide, and building meaningful connections between LYNX and the students.

### Chelly's Experience

This experience focused much more on my personal learning and growth than the students, due to the Covid 19 pandemic. Given the circumstances due to Covid 19, time working with students was limited and at times technology issues arose, which delayed the project's progress. In response to this, I completed an additional qualification on Incorporating Technology into the Classroom.

My learning focused on understanding the thinking behind computer science that students need. This took me down a path of reading about computational thinking and learning how I can teach this to my students. This helped me build my understanding of how to incorporate coding into my teaching practice and lessons.

I have developed an understanding of the primitives in LYNX and how to navigate the system. When I introduced the program to students, they were able to grasp it much quicker than I was. This was a great experience as students were able to lead some of the learning.

We have both learned about additional tools and opportunities for our students. Additionally, we learned of various organizations and opportunities which we can learn more about implementing coding in the classroom



## Next steps to continue our learning

Attend more professional development sessions, including Lynx sessions, to share ideas and collaborate with other educators.



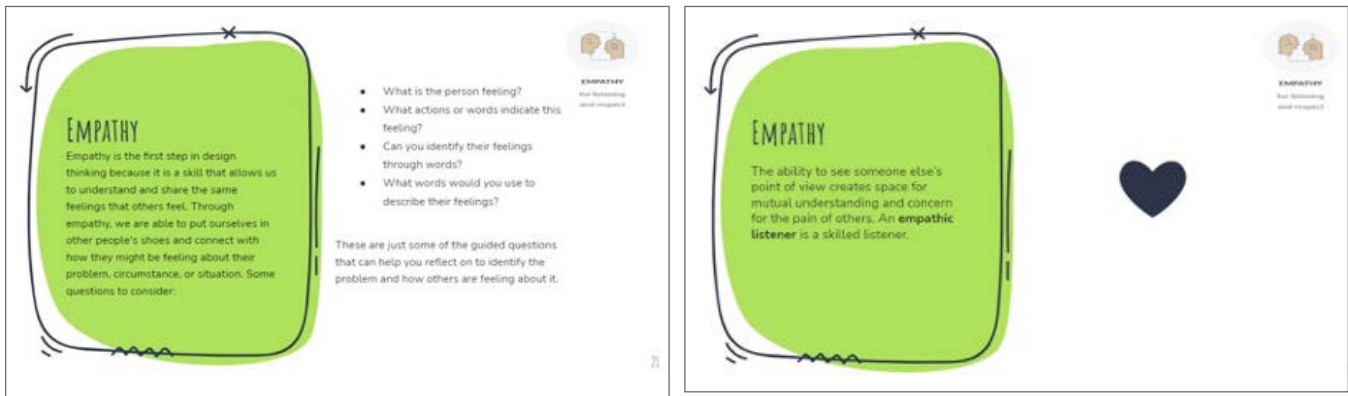
## How We Shared Our Learning With Others

- Through conversations with colleagues
- Shared information on Lynx with staff
- Shared resources we purchased with staff (e.g., the lessons from “No Fear Coding”) and one social media (non-specific)



## Links to Our Work

Taught the importance of empathy to students to prepare them for the end task we had planned.



Screenshot of a Google Meet that was held weekly with students during their lunch hour. During this time, a student was sharing his knowledge with his peers.

