



## Coding and Content

### Team Members:

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School District: Lambton Kent DSB



## What We Did

We began to build capacity in ourselves and in our students to use Lynx. We explored coding vocabulary. We incorporated Lynx coding into Math and Language lessons, using the lessons on the Lynx website. We compared capabilities and lessons between platforms of Lynx, Scratch, and MakeCode. We built a library to further explore computational thinking and support coding projects for teachers. We experienced professional learning opportunities by attending BIT, and other conferences and webinars.



## What We Learned

**What We Learned:** Reflecting over the last year, we realize this has been a great learning opportunity. Although the project didn't end up being as immersive or robust as we had envisioned, we definitely have grown/benefited from it as educators. These are some of our learnings.

**For Our Students:** We recognize that the focus of this project is to reflect on our own learning, but we thought we'd spend a brief time reflecting on our students' learning. We were upfront with our students that we were learning alongside them, and that gave some power over to them to become leaders and teachers in the classroom. Being exposed to Lynx expanded some students' experiences beyond block based, drag and drop coding. Students commented that coding in Lynx was "real coding" and they were proud to create projects using the commands and syntax in the program. Looking at different coding platforms reinforced the ideas that we try to convey in all subject areas, that there are multiple pathways for learning, creating and problem solving.

**Coding and Vocabulary:** When we first started diving into Lynx, on our own and with our students, it quickly became apparent that we were going to need to focus on vocabulary. Learning new terms about coding and the commands required for Lynx became a focus at the beginning of the project. We also found that even though we, and our students, were familiar with other coding platforms, there are multiple ways to refer to similar things. Sometimes we were able to leverage prior knowledge to make new links for vocabulary and sometimes it was starting at the beginning. We decided to make a word wall of Lynx coding terms and commands, for easy reference in the classroom. As our capacity increased, our reliance on the word wall has diminished.

**The Struggle is Real:** When we started learning Lynx we were feeling a little overwhelmed. We tried to take the easy way out and reached out to Peter and Brenda, asking them for help. They gave us a gentle nudge and encouraged us to jump in and work with Lynx on our own. So we decided to focus some release time just on learning the program ourselves. Our comfort and confidence with Lynx increased and we experienced the satisfaction that comes from perseverance and figuring it out on our own.



## What We Learned (continued)

This is a good lesson to be reminded of when working with our students. First of all, to employ patience and grace when students' first response is to ask for help or ask questions that have already been discussed. In our role as students in this grant project, we've had the same reactions. Secondly, to promote and allow for the struggle of learning for our students. Sometimes it would be easier to jump in and solve the problem, but that is not the best solution. Even though this is something we know, it's been good to be reminded of it but being on the other side.

**Time is needed:** We are great proponents of learning alongside our students, but we do need to feel some confidence in using the programs we are teaching. We began to use our release time to go through some of the lessons on the Lynx website. It was a good investment of our time, one that is not typically available to teachers when they are trying to start or learn something new. We appreciate that we had that time to explore and build our own capacity.

We also need to remember that when we are teaching new concepts in our classroom and give students the time needed to dig in and learn. It can't be compartmentalized in a 40-minute lesson.

**Play Time is Important:** When we introduced Lynx to our students, we allowed for some "play time" once they knew a few commands. This play time allows for students to explore and then be ready for listening and instruction. It's a low risk way for them to discover different capabilities of the program and it's fun. It also promotes collaboration, as they share with one another the different things they've been able to do. We think this is also important to remember as adult learners and that there are benefits to incorporating "play time" into our own learning journey.

**Teamwork makes the Dream Work:** Working together on this grant was such a benefit to us. Teaching can be such an isolating job, particularly this year with restrictions in place for the pandemic. Being able to collaborate on this project gave us fresh perspectives, someone to problem solve with, a wider PLC network and, frankly, supported our mental health during this difficult time.

**Lead by Example:** We learned about grace and generosity as Lindy, Peter and Brenda consistently supported us, cheered us on, guided us, and allowed for changes, patience, and "pivoting" during this project.



## How We Shared Our Learning With Others

We intended to release some other staff members in our intermediate division to share our learning with directly. However, due to the pandemic it was not feasible to release so many staff members.

We intended to go into other classrooms and develop leadership in our students by having them go with us to teach other students and teachers some of the coding lessons. However, due to cohorting this was not possible. We debated trying to do this through google meets but ended up abandoning that idea when we went to virtual teaching after the winter break. We plan to work in other classes and with other teachers when the Covid restrictions finally lift.



## Links to Our Work

[Lynx Word Wall \(Google Slides\)](#)