OTF Coding Connections - Ecole Hepworth Central School Coding Collaborations K-8

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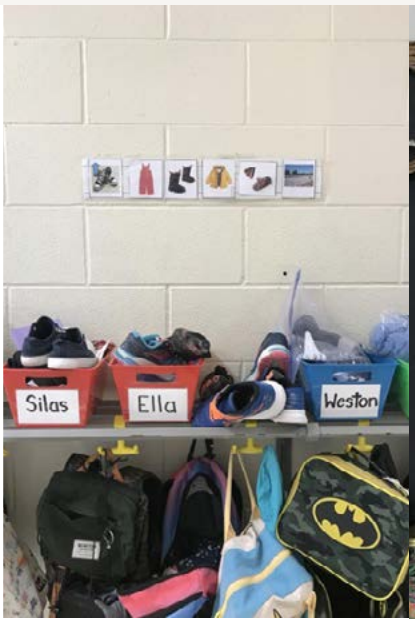
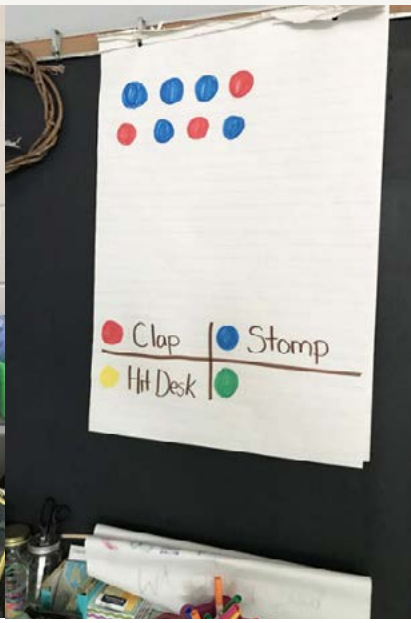
School District: Bluewater DSB





What We Did

- Our original goal was to implement a “coding buddies” program joining pairs of classes and focusing on collaboration activities and communication across grades and languages.
- Due to obvious barriers with covid protocols and not wanting to add the extra barrier of collaborating virtually, we revised our goal to focus on our own professional learning, confidence and competence in delivering computational thinking activities in our own classrooms, grades K and 7/8 respectively.
- We spent two days exploring the overwhelming wealth of resources available for all grades and preparing some introductory lessons for our classrooms, then implemented and reflected on them.

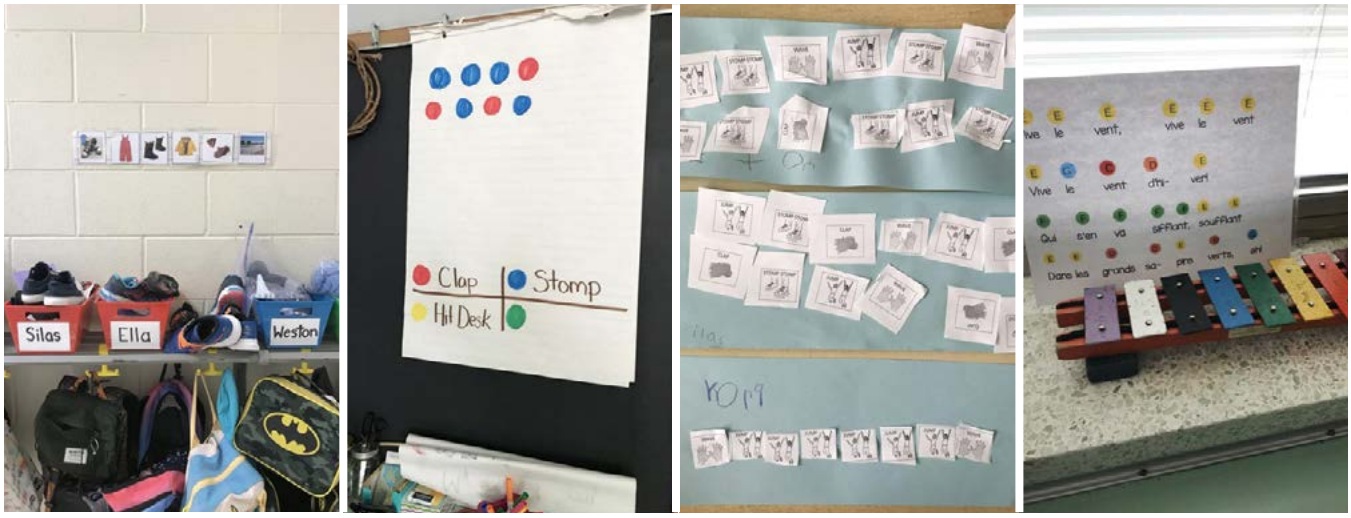
What We Learned

- Coding expectations of the new curriculum are organized in a very scaffolded manner, beginning with sequencing and becoming increasingly complex.
- Coding expectations align well with the mathematical process expectations, especially communication and problem-solving.
- Coding expectations lend themselves extremely well to cross-curricular planning including science and the Arts.
- Many teachers in our school feel “lost” when it comes to coding (and the entire new math curriculum in general) and indicated the desire for more professional development.

How We Shared Our Learning With Others

To this point, we have shared our learning with grade-alike partners in informal conversations, lesson-sharing and tips, and acting as the “go-to” people in the school for colleagues who are less familiar with coding and computational thinking. Moving forward, we’d still like to develop a more formalized in-school workshop that can answer frequently asked questions and provide a level of comfort and confidence to our colleagues, whenever that is appropriate. We find that our colleagues in general are fatigued by virtual professional development so we will wait for the time when we can gather and share in person (Maslow before Bloom).

Links to Our Work



In Kindergarten, we found grade 1 coding expectations (sequencing) in many activities that were able to integrate very seamlessly into the curriculum. Many of these were most successful when they linked to kinesthetic and sensory experiences, consistent with what we know about 5-6 year-old students as math learners and needing many multi-sensory experiences to consolidate new learning.

In grade 7-8, students were very motivated by the use of technology. Many students had little to no formal introduction to coding but picked up on principles quickly (no need to re-teach sequencing, repeating patterns/looping). This highlighted the cross-curricular nature of coding expectations and made us less intimidated as educators, delivering this programming. While students were motivated by the use of technology and visually stimulating programs like Scratch, they needed support to focus on the specific learning goals and tasks of each activity. It was a fine line to balance student enjoyment and motivation and still keep the trajectory of activities.

Any Next Steps We Have To Continue Our Learning

Moving forward, we'd still like to develop a more formalized in-school workshop that can answer frequently asked questions and provide a level of comfort and confidence to our colleagues, whenever that is appropriate. We find ourselves much more comfortable just having had dedicated time to read and comprehend the curriculum (especially the "teacher supports" sections). Reading the atmosphere of our school, we find that our colleagues in general are fatigued by virtual professional development so we will wait for the time when we can gather and share in person (Maslow before Bloom).