In the previous edition of the ICT newsletter we looked at the role of Seesaw at school
If you miss the previous newsletter you can find it here.

https://stjean.ecolevision.com/wp-content/uploads/sites/11/2018/04/Tics-Newsletter-2.pdf

I am pleased to share with you this edition of the École Trilingue Vision St-Jean's ICT Newsletter. This newsletter will be covering the increasing presence of ICT (Information and Communication Technology) at our school but also in our students' lives. In this newsletter you will learn about the different tools that we use in order to teach coding at our school.

Mr. François
Responsable de l'implémentation des TICs du Réseau des écoles Vision

Coding at Vision St-Jean

Here at École Trilingue Vision St-Jean we put an emphasis into preparing our students for tomorrow's world. One way we ensure that students become competent in coding is by introducing at a young age multiple aspect of coding. In this issue of the newsletter I will try to demystify the different tools that we use in the class to teach but also initiate students to coding.

Beebot (Pre-K - Kindergarten)

Bee-Bot is an exciting robot designed specifically for use by young kids. Children place the Beebot on a mat that represents a challenge to fulfil.On top of the beebot there are D-directional keys that are used to enter up to 40 commands which send Bee-Bot forward, back, left, and right. Pressing the green GO button starts Bee-Bot on its way. Bee-Bot blinks and beeps at the conclusion of each command to allow children to follow Bee-Bot through the program they have entered and then confirms its completion with lights and sound.

Code.org (Kindergarten - Grade 1, 2 ,3)

Code.org is a nonprofit that was created under the Obama administration. The goal of this website is to promote computer access and language skills amongst all kids including girls and minorities. Because of a partnership with Disney, Minecraft and Angry Birds students are able to use their favorite characters to solve coding puzzles or even create their own animation. Because there is some reading required in order to understand the basic instructions here at school we tend to start using Code.org around the middle of Grade 1 early Grade 2.
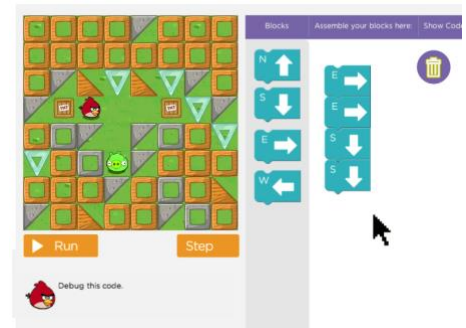
Scratch (Grade 3-4-5-6)

Brainchild of the MIT media labs and partnered with the Montreal's firm the Playful Invention Company , Scratch is a block-based visual programming language and online community with the aim of teaching kids how to code. Unlike Code.org, Scratch is a very powerful coding platform where if the student want to they can really push their project to the next level with recording capabilities , image importation and editing. People have even recreated popular games such as Super Mario or even Fortnite on Scratch. Because of the complexity and the learning curve that can be quite steep we tend to introduce scratch around end of Grade 3 here at school. By Grade 6, students will be creating projects for subjects like French , English or even Art.
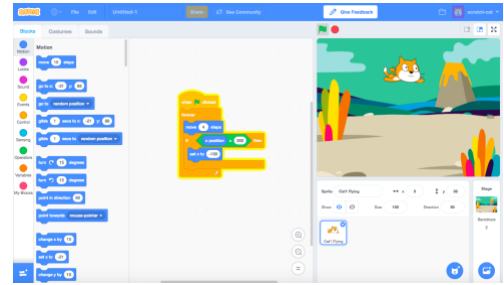
Lego Mindstorm (Grade 5-6)

Everyone is familiar with Legos but Legos Mindstorm line of products initiate students to coding and robotics. Using Lego pieces students will construct different model of robots for different tasks. These robots will be equipped with different type of sensors such as light, sound , temperature or touch. Once the robots have been assemble it is there that the fun begins. Students will then use a computer and code a program to make their robot interact with the world. Challenges , Obstacle course and mission can be assigned and modification on the fly to the robot are not uncommon. That makes this learning so interesting is that students take something from the virtual world and bring it to the real world.

Roblox Studio (Grade 5 -6)

Roblox is a game creation platform which allows players to create their own games using its proprietary engine, Roblox Studio. Games are coded under an object oriented programming system utilizing the programming language Lua to manipulate the environment of the game. Unlike scratch students are able to create complete 3D environments and with the help of previous coding experience really dive into the modification specifics in their project. As an example , Grade 6 students this year had to develop a prototype of a game and pitch it to the rest of the class in order to get funding. They also had to make a trailer to promote their game and keep a close eye on their developing cost as well as fix the price point for their game in order to ensure profitability.
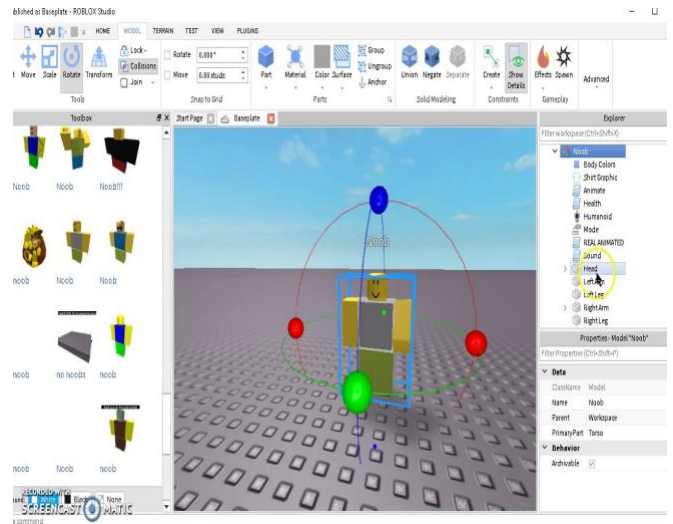
Apps and Websites to look at

Tynker: Tynker offers self-paced online courses for children to learn coding at home, as well as an engaging programming curriculum. Students are even able to code mods for minecraft that they can use in the PC version of the game

Available on IOS and PC

Hopscotch Coding: Kids simply drag and drop to create programs. The visual blocks of code scaffold learning to code for kids, allowing them to grasp the logic and steps of coding without actually writing code

Available only on IOS

LEGO MINDSTORMS Fix Factory: This new LEGO Mindstorms app helps students learn the very basic aspects of programming in the form of a fun 'sci-fi themed' robotic game. Supporting the concept of logical and special thinking students have to control the robot 'EV3RSTORM' to complete the assigned tasks within each level of the game.

Available only on IOS