

Dans le clavardage, dites-nous...

- De quelle région provenez-vous ?
- Quelle année scolaire enseignez-vous ? Et quelle matière ?
- Quel est votre niveau de familiarité avec le Micro:bit ?
(Il n'y a pas de bonne ou de mauvaise réponse !)



**Service national
COMMUNAUTÉ ANGLOPHONE**

JOURNÉE DU NUMÉRIQUE EN ÉDUCATION

.....

Nouveau cours Micro:bit : 8 modules pour l'enseignant et l'élève



Chris COLLEY



Carolyn BUTEAU



Craig BULLETT

Cohabiter sur Zoom

- Svp **fermez votre micro** lors de la présentation.
- **Utilisez le clavardage** pour les questions ou commentaires OU **levez la main** pour prendre la parole.



Au menu !

- Activité brise-glace
- Expérience **Mains sur les touches** (initiation + intermédiaire & avancé)
- Partage de notre expérience autour de l'intégration du M:B en classe
- Présentation des modules virtuels

Activité brise-glace

“GIF” tes réponses : PADLET

GIFs: [GIPHY.com](https://giphy.com)



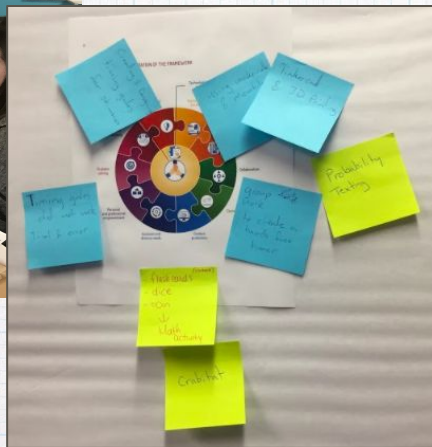
Questions

1. Partage ta réaction lorsque tu dois intégrer une nouvelle technologie en classe.
2. Quel est un dilemme que tu vis en enseignement ?



5 écoles –
3 primaires et 2 secondaires,
et une classe en ligne

13 profs, 22 groupes
du 3e cycle primaire et secondaire



Projet pilote – début en 2018-2019,
deuxième année 2019-2020 avec

2 CS – Lester-B.-Pearson
et Sir-Wilfrid-Laurier



Cadre de référence de la compétence numérique



DIGITAL COMPETENCY FRAMEWORK

Micro:bit and Programming



1 EXERCISING ETHICAL CITIZENSHIP IN THE DIGITAL AGE



2 DEVELOPING AND MOBILIZING TECHNOLOGICAL SKILLS



3 HARNESSING THE POTENTIAL OF DIGITAL RESOURCES FOR LEARNING



4 DEVELOPING AND MOBILIZING INFORMATION LITERACY



5 COLLABORATING VIA DIGITAL TECHNOLOGY



6 COMMUNICATING VIA DIGITAL TECHNOLOGY



7 PRODUCING CONTENT VIA DIGITAL TECHNOLOGY



8 USING DIGITAL TOOLS TO FOSTER INCLUSION AND ADDRESS DIVERSE NEEDS



9 MOBILIZING DIGITAL TECHNOLOGY FOR PERSONAL AND PROFESSIONAL EMPOWERMENT



10 SOLVING DIVERSE PROBLEMS VIA DIGITAL TECHNOLOGY



11 DEVELOPING CRITICAL THINKING WITH REGARD TO THE USE OF DIGITAL TECHNOLOGY



12 ADOPTING AN INNOVATIVE AND CREATIVE APPROACH TO THE USE OF DIGITAL TECHNOLOGY

NAME: _____

PLANNING FOR COMMUNICATION

What is the message or information that I want to communicate? Add purpose: What do I want my audience to understand?

Who is my intended audience?

peer ☒ parent ☐ teacher ☐ other ☐

What do I know about my audience that can help me decide how to communicate my message?

My audience are: _____

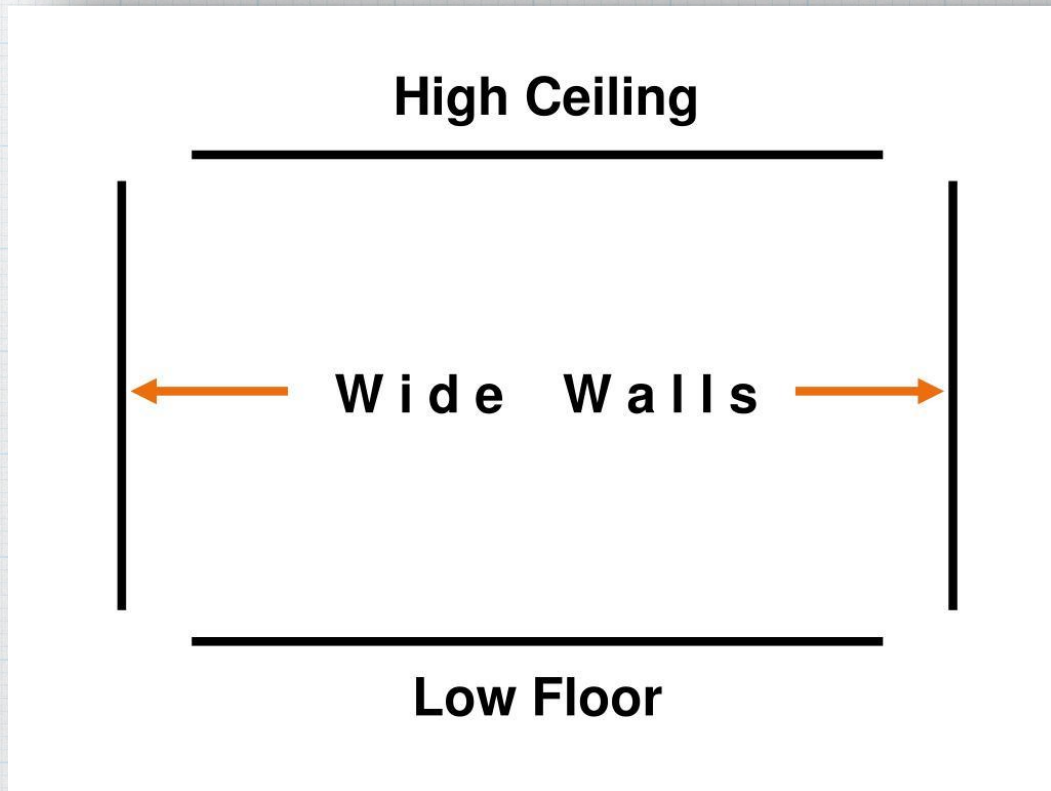
My audience may feel: _____

What are ways that I can convey this message or information?

Which way is best going to I choose? Why are these the best ways?

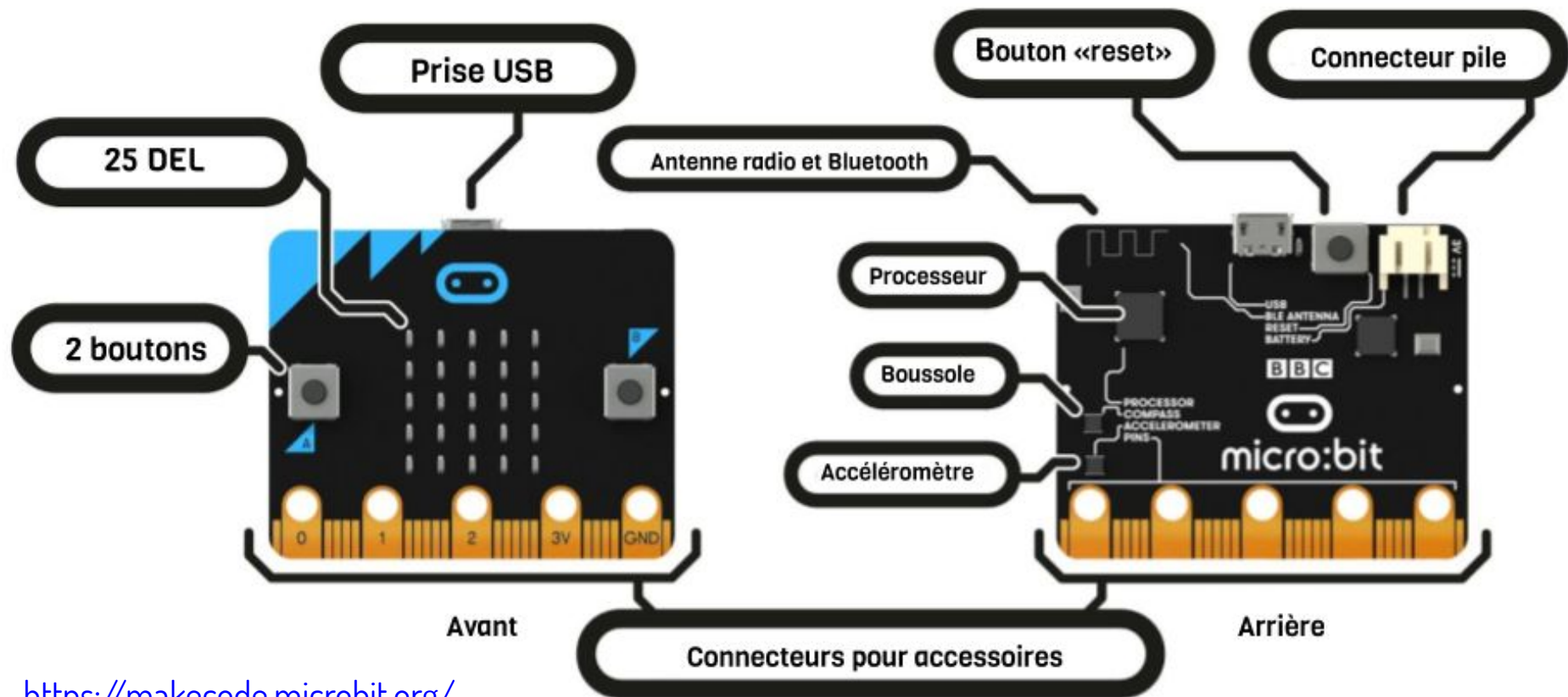
WHERE I LEARN THIS: 

Pourquoi le Micro:bit?



Qu'est-ce qu'un Micro:bit?

programmation par
blocs



Jouons !!

MICRO:BIT MATH

MAKE A DIGITAL DICE

This is one of the simplest creations with Micro:bit but it does allow kids to explore variables, simple conditionals and using the accelerometer.

THIS CODE MAY HELP

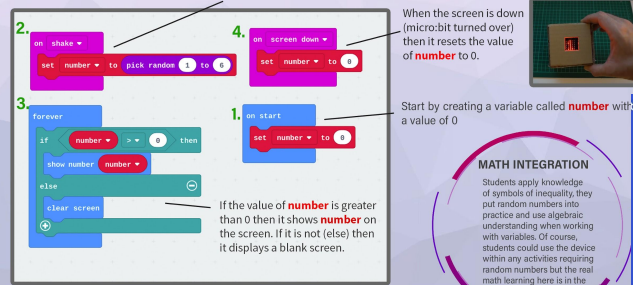
When the micro:bit is shaken the value of **number** is set to a random number between 1 and 6

When the screen is down (micro:bit turned over) then it resets the value of **number** to 0.

Start by creating a variable called **number** with a value of 0

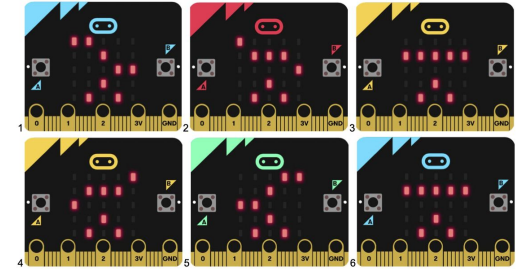
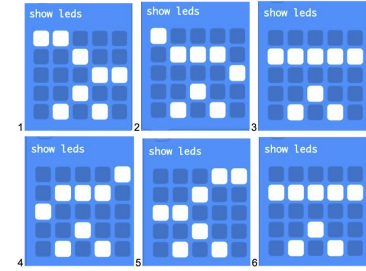
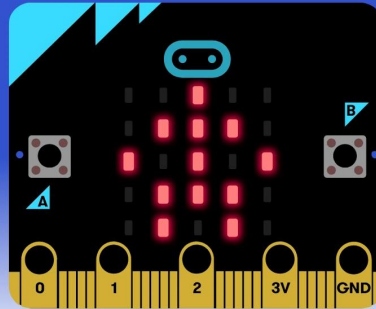
If the value of **number** is greater than 0 then it shows **number** on the screen. If it is not (else) then it displays a blank screen.

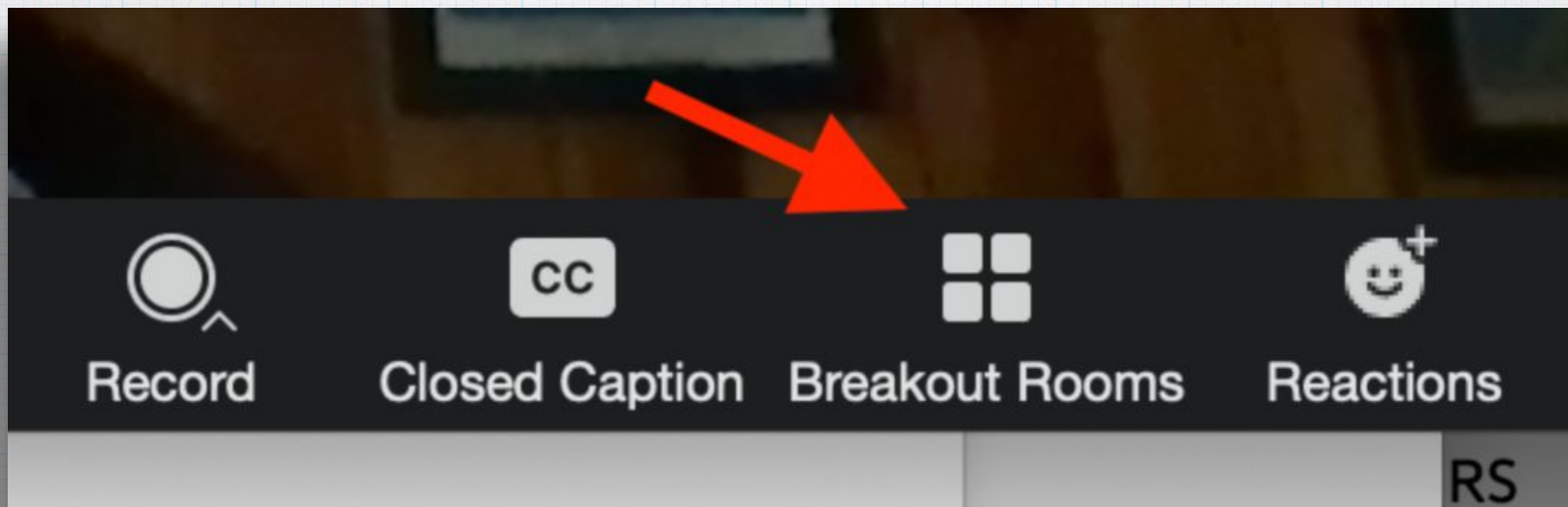
MATH INTEGRATION
Students apply knowledge of symbols of inequality, they put random numbers into practice and use algebraic understanding when working with variables. Of course, students could use the device within any activities requiring random numbers but the real math learning here is in the coding.



MAKING VIDEO LINK: <http://bit.ly/microbit-dice>

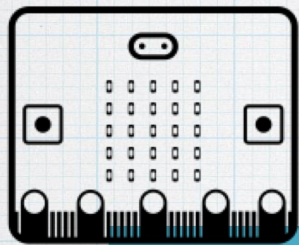
micro:bit
@BHS





Salle #1 - Introduction au Micro:bit (Pas de Micro:bit ou pas/peu d'expérience)

Salle #2 - Pour les intermédiaires ou avancés avec un Micro:bit en main



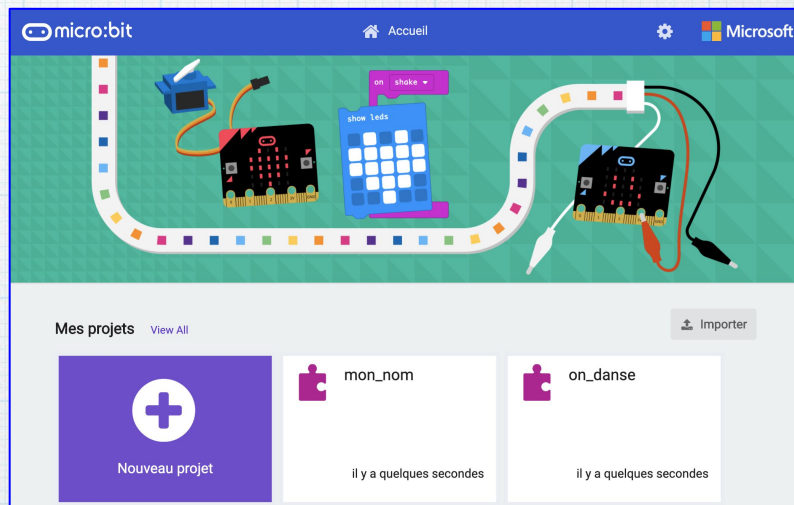
HANDS ON

Défis avec un Micro:bit ou le simulateur

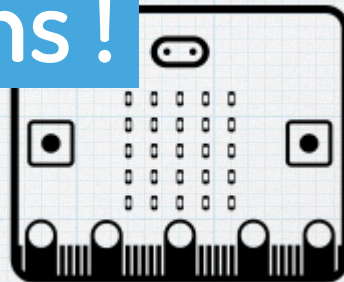
<https://makecode.microbit.org/>

Défi 1: On danse! Anime un personnage à l'aide des LEDs.

Défi 2: Programme un dé ou une "boule magique 8".



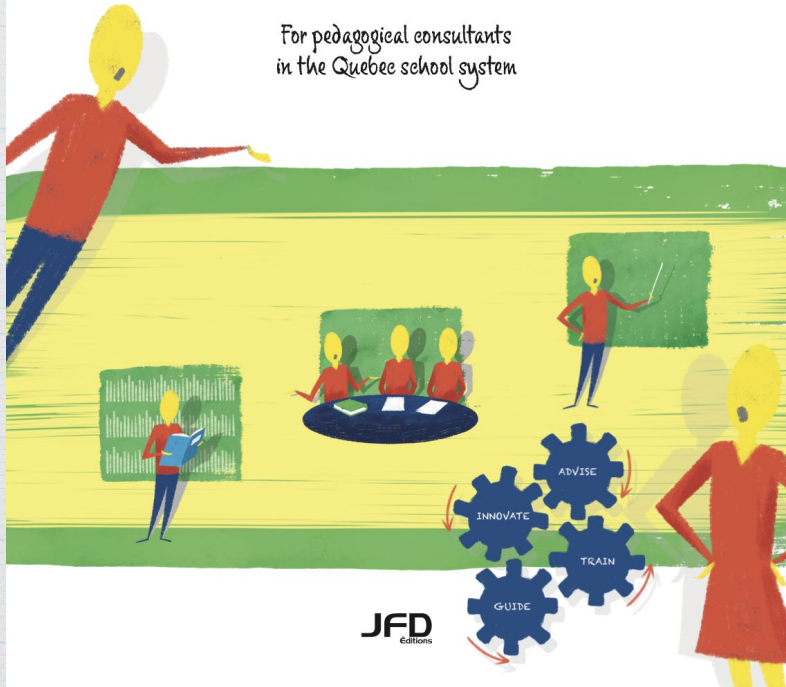
Montrez-nous vos créations !



Suzanne Guillemette
Isabelle Vachon
Donald Guertin

**Framework for competent
action in educational consulting:
Fostering student success**

*For pedagogical consultants
in the Quebec school system*



RÉFÉRENTIEL DE L'AGIR COMPÉTENT EN CONSEILLANCE PÉDAGOGIQUE EN SOUTIEN À LA RÉUSSITE DES ÉLÈVES

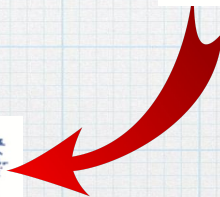
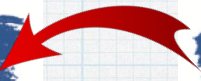
Conseiller, former, accompagner, innover sont les quatre vecteurs sur lesquels se déploient les interventions professionnelles des conseillères et des conseillers pédagogiques des Commissions scolaires du Québec.

CONSEILLER

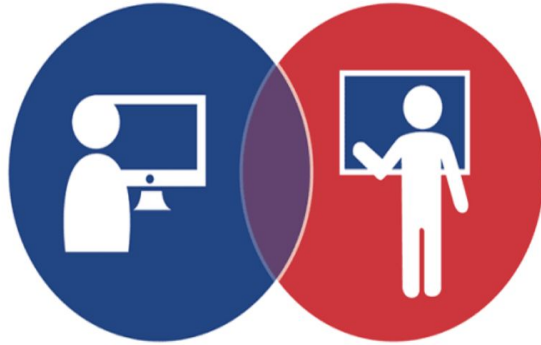
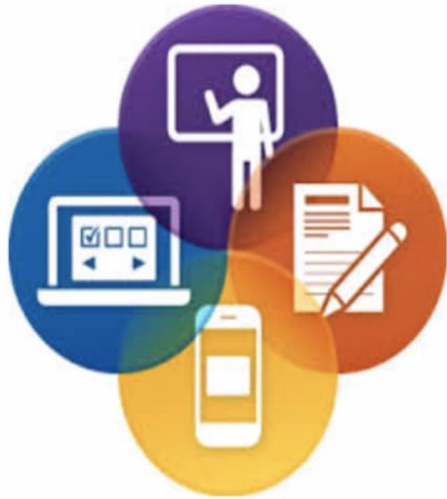
FORMER

ACCOMPAGNER

INNOVER

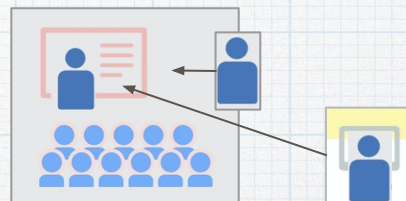


Avec la pandémie, tout a changé...
...mais on s'est adapté.



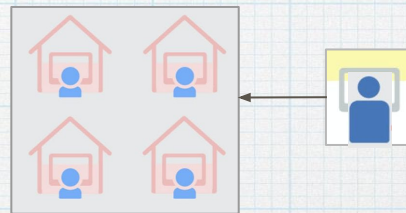
Différentes modalités

- Prof et ses élèves en classe



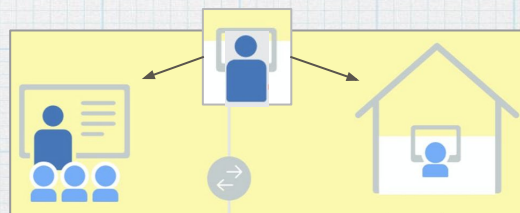
CP en
ligne ou
en classe

- Prof et élèves en ligne à la maison

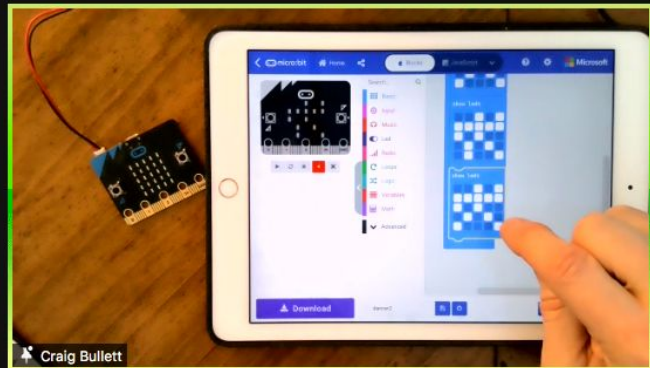


CP en
ligne

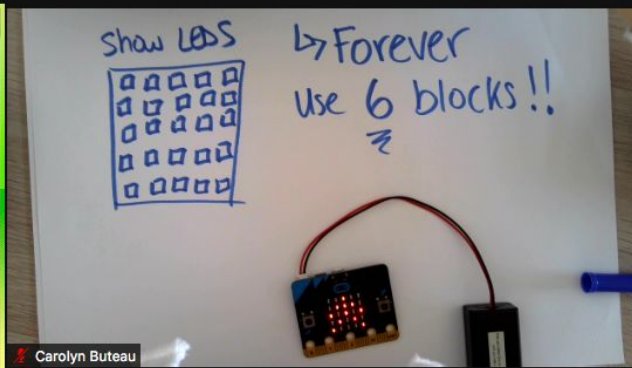
- Prof et ses élèves en classe et en ligne de façon hybride



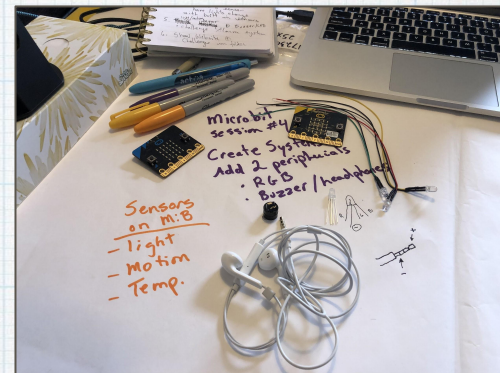
CP (ou
autre
expert)
en ligne



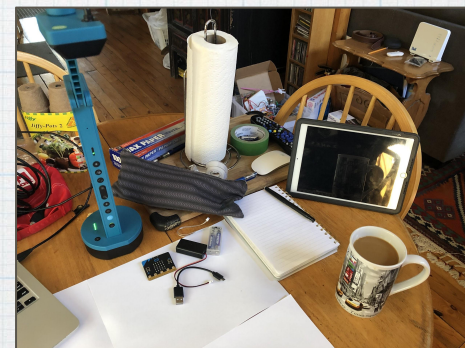
Craig Bullett

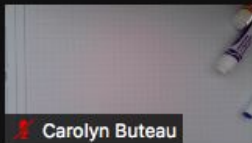


Carolyn Buteau

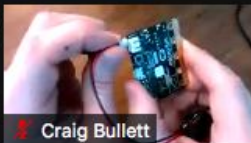


slarochelle





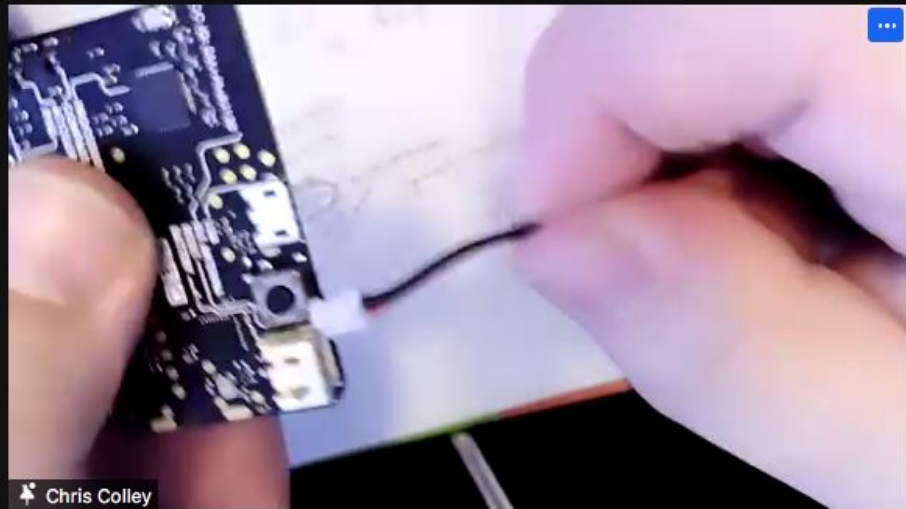
Carolyn Buteau



Craig Bullett



Affichage



Chris Colley



Miss

Projet Micro:Bit avec une classe en ligne Science Techno 4e sec

Séance n°1

Introduction au Micro:bit, à la plateforme MakeCode et aux premiers défis.

Accent sur les boutons et l'affichage dans le simulateur

Séance n°2

Connexion et télécharger le programme sur le Micro:bit.

Les défis d'animation et de la connexion des DEL externes.

Séance n°3

Les capteurs du Micro:bit :

Les défis de la température, du capteur de lumière et de l'accéléromètre

Séance n°4

Brancher plus de périphériques.

Défis avec le DEL RBV, puis ajouter un capteur pour contrôler le DEL RBV.

Séance n°5

Aperçu des ressources. Projets débutants : Système d'alarme avec buzzer, DEL, capteur de mouvement et capteur de lumière.

Lancement du projet final.

Séance n°6 et 7

Sessions de travail pour élaborer le projet et débogage des projets avec les élèves.

Séance n°8

Exploration de Scratch et de son lien avec Micro:bit. Retour sur le projet final et l'utilisation de Flipgrid pour présenter leurs projets.

Une activité par semaine pendant 8 semaines.

Projet Micro:Bit avec une classe en ligne Science Techno 4e sec

Séance n°5

Lancement du projet final,
inspiré du projet *Do your :bit.*

Compétences en ST

Démarche de la conception technologique



The BIG Micro:bit project

Now that you have experimented with several possible uses of a microcontroller, here is your chance to be creative on your own.

Goal of BIG project:

The objective of the BIG project is to be able to build something original (never seen or done before) that serves a specific purpose of your choice. The first steps involve a brainstorming session in which you will Copy then fill this [Planner](#) and Share with your teacher.

Requirements:

You will need to combine at least two programs from the various trials seen in class with the Learn Micro:bit Team and add the necessary parts to reach the purpose you want to fulfill. To help you keep on top of your progress, use this personal [Google Doc Log](#) where you will be storing all relevant information related to the development of your project.

The rubric below will help grade your response:

Exploring and Experimenting	Low level of competency	Medium level of competency	High level of competency
Describe your project	Student provides a basic description of building a project, but no details about a specific project.	Student gives a general example of building a specific project.	Student provides details about the different components of a specific project and how they were developed.
Describe things you have tried, things you had to review in order for it to work	Student does not provide specific examples of what they tried. Student says they made no revisions, or only states they made revisions but gives no examples.	Student gives a general example of trying something in the project. Student describes one specific revision they made to the project.	Student provides specific examples of different things they tried in a project. Student describes the specific things they revised in the project and why.
Testing and debugging	Low level of competency	Medium level of competency	High level of competency
How did you realize you ran into a problem? What did you do to find its source?	Student does not describe a situation that involves a problem with a project.	Student describes what went wrong in the project, but not what they wanted it to do. Student describes reading through the scripts, but does not provide a specific example of finding a problem in the code.	Student gives a specific example of what happened and what they wanted to have happen when they ran the project. Student describes reading through the scripts and provides a specific example of finding a problem in the code.
How did you fix the problem?	Student does not describe what problems they experienced, or the solution.	Student provides a general example of making a change and testing it out to see if it worked.	Student provides a specific example of making a change and testing it to see if it worked.
Re-using and re-mixing	Low level of competency	Medium level of competency	High level of competency
What inspired you to do your BIG project?	Student does not describe how they found ideas or inspiration from other projects.	Student provides a general description of a project that inspired them.	Student provides a specific example of project that inspired them and how.
What constraints and important elements did you have to take into consideration when putting together your BIG project?	Student does not describe how they adapted scripts, ideas, or resources from other projects.	Student provides a general description of scripts, ideas, or resources they adapted from other projects.	Student provides specific examples of scripts, ideas, or resources they adapted from other projects and how.
What decisions did you have to take in order to reach the goal set in your BIG project?	Student provides no description of how they selected tools and techniques pertaining to their project.	Student provides a general description of their selection of tools needed for their project.	Student provides a specific description of how they made decisions based on goals for the project.

Vers 8 modules pour l'élève, l'enseignant et le CP

De notre Padlet à un cours de 8 modules.

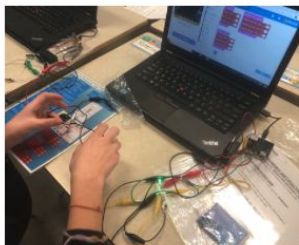
<https://bit.ly/MBunits>

Meet the Micro:Bit

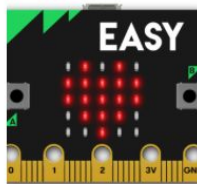
The Micro:Bit is a pocket sized computer (or microcontroller) with features allowing you or your students to code your awesome ideas!

The Micro:Bit has integrated features such as programmable LEDs, buttons, motion and temperature sensors, but also has pins which allow you to connect motors, sensors or any other electrical component to your Micro:Bit. View the [Material & Supplies section](#) for lists of material and suppliers.

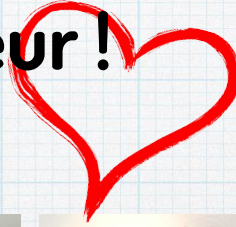
The [LEARN-RECIT](#) team has been piloting Micro:Bit classes both online and in person for the past 3 years. Requests keep flowing in... and since we can't divide ourselves, we reflected on how to support and equip teachers who wish to integrate the MB in their teaching. We therefore developed this [8-Unit course](#) for teachers and students. It includes lessons, discussion questions, tutorials, challenges, project ideas, debugging strategies and much more! The course is structured so that it can be used by teachers OR students.



In 3 words, the Micro:Bit is...



**Explorons le site à travers nos
coups de coeur !**



Liens avec le C

compé



The image displays a collection of 12 circular icons arranged in a grid-like pattern. Each icon represents a different skill or competency. The icons are: a graduation cap, two hands shaking, a lightbulb, a target with an arrow, a computer monitor, a magnifying glass over a document, a speech bubble, a smartphone, a circular arrow, and a group of people around a gear.

Liens avec le Cadre de référence de la compétence numérique

ocs@learnquebec.ca

MERCI !



Service national
COMMUNAUTÉ ANGLOPHONE