Minecraft in the French Immersion Math Classroom

Grade 5:

i) Solving and creating problems involving measuring the area and perimeter of a rectangle.
ii) Speaking to communicate information and ideas orally in French using a variety of speaking strategies and age-and grade-appropriate language suited to the purpose and audience.

Overall expectations:

Math: By the end of Grade 5, students will:

- **estimate, measure and record perimeter, area, temperature and elapsed time using a variety of strategies.**
- **determine the relationships among units and measurable attributes, including the area of a rectangle and the volume of a rectangular prism.**

http://www.edu.gov.on.ca/eng/curriculum/elementary/math.html

French: B1 http://www.edu.gov.on.ca/eng/curriculum/elementary/fsl.html

Specific expectations:

Math: By the end of Grade 5, students will:

- **estimate and measure the perimeter and area of regular and irregular polygons, using a variety of tools.**
- **select and justify the most appropriate standard unit to measure length, height, width and distance, and to measure the perimeter of various polygons.**
- **solve problems requiring the estimation and calculation of perimeters and areas of rectangles.**

French: B1.1, B1.2, B1.3, B1.4,

Resources: iPads with access to Minecraft, Smartboard. Any necessary words and expressions lists, word wall, Math wall.

Words and expressions: Students had already learned the words associated with measuring perimeter and area and problem solving in French, as well as the words for rooms in a house and family members.

Introductory activity: Students reviewed different vocabulary required to describe a house, or different buildings in a town. Students had also practised solving the perimeter and area of rectangles.

Development: Students solved a variety of problems involving measuring the perimeter and area of rectangles. (e.g.: see attached Smartboard file.)

Dans le restaurant de "La Mer Affamée", les tables sont rectangulaires,et elles mesurent 2 m sur 1 m. À chaque extrémité de cette table, il y a un panneau que l'on peut relever pour agrandir la table. Ce panneau a une largeur de 50 cm. Quel est le périmètre d'une table lorsque les deux panneaux sont relevés? Écris ta démarche.

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Concluding activity: Having solved a variety of problems using different strategies, students were asked to create problems involving real-life situations where they would need to calculate the area or perimeter of a room in a home or other building. They needed to provide scale, for example, one block equals one metre, and present the problem using Minecraft.

Assessment: Students created videos using screen captures of their room or fenced yard and importing them into applications such as Shadow Puppet, to present their problems. Throughout this process, the teacher circulates and asks students to explain their thinking, using Math vocabulary.

Follow-Up: Students share their videos with their class and receive peer feedback. In cases where errors in calculation were made, students were given the opportunity to make changes, based on this feedback. All interactions occurred in French, whether rehearsed or spontaneous.