Enrichment Program Report

Willingdon Elementary School

2021-2022

One specific aim of the Gifted and Exceptional Learners' mandate for the 2021-2022 academic year was Matching Instruction with Needs through the design and implementation of School-wide Enrichment initiatives and Acceleration Strategies (i.e., compacting curriculum) for individual bright and talented students at EMSB schools.

At Willingdon Elementary School, we successfully designed and implemented four individual enrichment programs and two school-wide enrichment programs: Public Speaking and Debating and Let's Talk Sciences. Willingdon's achievements in each program will be discussed below, along with the future enrichment plans for the upcoming school year of 2022- 2023.

Individual Enrichment Programs (November 2021 – June 2022)

Sky Fraser and Eve Gartshore, Grade 3 - Book Creator

Dr. Birlean created this individual enrichment program to tailor specifically to the areas of strengths, interests, and needs of the students based on the results of their individual strengths assessments. Dr. Birlean conducted a comprehensive report outlining the tier 1 (classroom differentiation) and tier 2 (enrichment program differentiation) interventions for these students. Dr. Birlean led case conferences with the students' parents and/or guardians, their classroom teachers, and other school team members, such as the school psychologist and special education consultant. Each student was given 2-3 options for their enrichment program, based on the results of their strengths assessment and case conferences. Ultimately, Eve Gartshore and Sky Fraser chose to create their own story as their enrichment project.

Some of the skills learned during this individual enrichment program include:

- Collaboration
- Regulating emotions
- Creativity
- Organization of ideas
- Character development
- Finding credible sources of information
- Using the story arc
- Using proper grammar, punctuation, spelling, sentence structure, etc.
- Using the book creator platform

Eve Gartshore and Sky Fraser created a complete story using Google's Book Creator platform for this individual enrichment program. Before beginning the book creation process, the students spent some time completing activities related to elements of character development, the story arc, and other skills related to the story creation process. The two students practiced creating

their characters, completed individual writing activities, and learned how to find and use credible sources before beginning the book creation process.

Following the development of the aforementioned skills, students worked on creating characters for their story and developing a plot using the traditional story arc. Students used graphic organizers/planners to organize their ideas and divide the work for each page in the story. Sky and Eve stored these organizers, the activities completed in prior sessions, and the drawings in a duotang. This duo tang was used in every session and was an essential tool in the book creation process. Once the organizer was complete, the students would spend the rest of the session adding text, drawing pictures, and editing the text in their story to ensure proper spelling, punctuation, grammar, and sentence structure.

Finally, once the story was completed, the students made some final edits and shared their story and elements of the book creation process during the end-of-year board-wide knowledge fair. The book they created will be printed and added to the Willingdon School library for all students to read.

Jackson Garofolo, Logan Chin, and Luca Negrete, Grade 3 - NASA -Engineering and Design

Dr. Birlean created this individual enrichment program designed to tailor specifically to the strengths, interests, and needs of the students based on the results of their individual strengths assessments. Dr. Birlean conducted a comprehensive report outlining the tier 1 (classroom differentiation) and tier 2 (enrichment program differentiation) interventions for these students. Dr. Birlean led case conferences with the students' parents and/or guardians, their classroom teachers, and other school team members, such as the school psychologist and special education consultant. Each student was given 2-3 options for their individual enrichment program, based on the results of their strengths assessment and case conferences. Ultimately, Jackson Garofolo, Logan Chin, and Luca Negrete chose the NASA engineering and design program for their individual enrichment projects.

Some of the skills learned during this individual enrichment program include:

- Collaboration
- Creativity
- Organization of ideas
- Planning and sketching a prototype
- Building a prototype
- Testing a prototype
- Making adjustments based on the tests

This team-based enrichment program featured a series of space-related engineering challenges in which the students were asked to design, build, and test a series of prototype models using recycled materials and purchased materials. Some of the prototypes created by these students throughout the program include a satellite, a lunar buggy, and a moon landing pod.

Each week, the students in this program would face a new challenge. Each challenge would have specific parameters in relation to the final product. For example, the lunar buggy challenge asked students to create a prototype that could travel 100cm down a ramp, protecting cargo (a plastic egg) and astronauts (clay figures). Therefore, the students had to create a prototype with these parameters in mind and consider these explicit parameters during the design phase.

Upon reading through the challenge, each session would begin with the planning and design phase. Students would individually create their design plans on a sheet of paper. Once completed, the three students would come together to create a master design on a large sheet of construction paper. The students were asked to be specific in their design, labeling each part of the prototype, its function, and what materials they would need. Once approved, the students would begin building their prototype following their design.

The second phase of the challenges involved creating a prototype model using the supplies available. Students had many recycled materials, such as cardboard boxes, egg cartons, and plastic containers. Along with these materials, the students had a selection of purchased materials such as tape, string, popsicle sticks, rubber bands, straws, cotton balls, and bubble wrap. These supplies were purchased specifically for the students in this enrichment program. During the building phase, students would work collaboratively to build their prototype model based on their initial design. Once completed, the students would move on to the testing phase.

The final phase involved testing the prototype to see if it could successfully complete the mission for the specific challenge. For example, the lunar buggy challenge was to have the prototype travel 100cm down a ramp keeping the cargo and astronauts intact. During this testing phase, students would record the results of each test and make adjustments to their prototype based on the test results, if needed. For example, during the lunar buggy challenge, the prototype would not travel straight down the ramp. To fix this, the students stabilized the axle with tape to allow the prototype to travel straight down the ramp and complete the challenge.

The students were offered the opportunity to share their learning with the larger school board community during the end-of-year board-wide knowledge fair.

Theodore Muller, Grade 2 – Scratch Programming

Theodore Muller benefited from a formal alternative program weekly mentored by Sarah Lubbe throughout the 2021/2022 school year. Dr. Birlean tailored this program to Theodore's learning styles, strengths, and interests and was identified by Dr. Birlean, who conducted a formal strength assessment. Based on Theodore's identified learning styles and strengths, Theo began a project in Scratch, foley design, and music composition. Throughout the program, Theodore created various videos and games through the program Scratch. Additionally, Theo recorded his piano playing, voice, and Ms. Sarah's voice as soundtracks and sound design for his game and videos. Theo briefly engaged with the compositions of John William and Camille Saint-Saënes. Theodore created a slideshow for his final presentation and recorded himself presenting his learning for the EMSB Knowledge Fair. Presenting at the knowledge fair was a great achievement, as initially, Theodore did not want to present or showcase his work at all.

Skills Theo gained from this program.

- **Planning** a story arch by drawing and writing out notes using a visual organizer provided by Sarah Lubbe
- **Creativity** - Using his creative side to think up short video skits
- **Animation** - Creating animations using code “blocks” on Scratch
- **Sound Design -** Recording his voice, piano playing, and sound effects (using various found household objects) and applying them to short videos and games.
- **Musical Exploration and Improvisation** - Created an interactive "piano" on Scratch in which Ms. Lubbe challenged him to start improvising and creating short musical melodies

Future recommendations for Theodore.

Theodore would **greatly benefit** from future alternative programs such as

- Learning centers within the classroom in areas he excels.
- Embarking in another individual alternative program in an area of his interests, such as creating videos (animated or stop motion), sound design (foley & voice acting), and musical composition and improvisation (piano).
- Future Problem Solving – Global Issues

Areas in which Theodore can be challenged.

- Creating larger projects, either as animated videos or video games, in which Theodore would plan and follow through with executing his ideas. He may be interested in exploring filmmaking.
- Presenting to an audience and sharing his work. Theo may benefit from the Public Speaking and debate club, where the program would challenge Theo to present a

public speech and engage in a live debate. This program would also teach Theodore how to think critically and how to research a topic.

William Ordonselli, **Grade 1**– **Book Creator**

William Ordonselli benefited from a formal enrichment program offered weekly outside the class throughout the 2021/2022 school year. Dr. Birlean tailored this program to William's learning styles, strengths, and interests, and identified by Dr. Birlean, who conducted a formal strength assessment. Based on William's identified learning styles and strengths, William began a project on catapult design and wrote a book on catapults. Throughout the program, William designed and built four catapults using various materials following the engineering design process. Additionally, William created a book using the software Book Creator. This book included a brief history of the mangonel, an exploration of kinetic and potential energy, and steps to creating catapults and mangonels using different materials. William made a slideshow for his final presentation and presented his work at the EMSB knowledge fair. William's book has been printed, and a copy given to the Willingdon Library for display.

Skills William gained from this program.

- **Engineering Design Process** - Introduction to the engineering design process (Imagine, plan, create, experiment, improve and ask)
- **Making mistakes is part of learning -** Building and improving his ideas. William was able to build and recognize design flaws within his catapults/mangonels and created new and improved designs.
- **Observation and recording**. Introduction to observation and recording information. William measured and recorded how far his mangonel could shoot pom poms in a small chart.
- **Writing** - William wrote (with the assistance of Ms. Sarah) about his designs in Book creator.
- **Brief history of catapults and mangonels**. William was introduced to the history and design of mangonels and catapults.

Future recommendations for William.

- Learning Centers within areas in which he excels. William was offered enrichment in math using IXL but did not engage with it. Next year with more encouragement, William may benefit from using this program.
- Embarking in another individual alternative program in an area of his interests, such as another engineering design project, exploring design within a group using the NASA program, embarking on exploring video game design using the program Scratch.

Areas in which William can be challenged.

- **Writing.** William can be challenged to write longer sentences and paragraphs using proper grammar and spelling.
- **Design Process.** William can be challenged to embark on a longer project complete with planning, executing, recording, and improving on his original design
- **Deeper learning.** William can be challenged to engage with his projects deeper, such as reading small paragraphs, watching videos, and completing short homework assignments based on his area of interest.

Math Learning Center

This learning center was offered to two grade 3 classes at Willingdon School (Ms. Dove). Students who displayed exceptional skills in mathematics could access the learning center at the discretion of their homeroom teacher. This learning center is a resource available to all students, not only those in the individual enrichment program. However, it was at the homeroom teacher's discretion to allow their students access to the learning center on a case-by-case basis.

The learning center featured a series of problems to challenge the students beyond the grade 3 curriculum. Students had access to situational word problems such as Problems of the Week (POWs) and Figure This! Challenges. Students were able to solve these problems individually or in small groups. Students also had access to a subscription-based learning platform IXL, to develop specific math skills. The students' math teacher had access to a folder with particular word problems that would change each week, along with dedicated iPads for IXL learning.

The students also had an academic success tutor available to them should they need extra guidance. The goal was for these students to work autonomously in their classroom, with this learning center serving as a resource for their math teacher once they completed and exceeded the regular curriculum expectations.

French Learning Center

This learning center was offered to two grade 3 classes at Willingdon School (Ms. Serenco). Students who displayed advanced skills in French could access the learning center at the discretion of their homeroom teacher. This learning center is a resource available to all students, not only those in the individual enrichment program. However, it was at the homeroom teacher's discretion to allow their students access to the learning center on a case-by-case basis.

This learning center featured themed French learning activities centered around the topic of wolves. The activities for this learning center focused on aspects of reading comprehension, creative writing, and grammar. Students permitted to use this learning center had access to an iPad allocated explicitly for this learning center. This iPad was stored in the classroom so students could have quick and easy access to the learning center anytime.

The students also had an academic success tutor available to them should they need extra guidance. The goal was for these students to work autonomously in their classroom. This learning center was a resource for their French teacher once they completed and exceeded the regular curriculum expectations.

Junior School Enrichment Program: Debating and Public Speaking
(1h/weekly January – April 2022)

This program offers participants an ideal preparation for the future high school debating clubs and helps readdress the dearth of competitive opportunities for young debaters and public speakers. Our rounds of speech events combine the emphasis on debate skills with persuasion and rhetoric.

20 Willingdon students (G4-5) embarked in the Debating program's sessions, which occurred weekly for one period and were coached by a mentor.

Our program mainly focused on the development of the following skills: public speaking, researching for valid and reliable sources (e.g., library workshop), note taking, organizing information (e.g., designing concept maps), writing persuasive arguments to support the chosen stance, critical thinking (e.g., evaluating the sources read), listening, and team working. Near the end of the program, children were offered the opportunity to enact a real debate on a given topic using the Canadian Parliamentary structure as they competed in the semi-final and final debate against Roslyn Elementary School.

The formal title of our debate was: ***Children under the age of 16 should not be allowed on social media.***

The junior teams competing against each other were
Roslyn opposition - Amilcar Melilr Vawda, Oliver Lee, and Zack Crosbie
Vs.
Willingdon proposition - Zoe Flanagan, Jaya Pasquero, and Marley Corina Cowper

The senior teams competing against each other were:
Roslyn opposition: Kieran Smalley and Alessia Di Gennaro

Vs.

Willingdon Proposition- Louise Sullivan, Taiya Bernard, and Alison Driver

Willingdon's team won the final debate at the junior level against Roslyn Elementary School. Each winner received an Indigo gift card of 25 CAD value. In addition, all participants were awarded a 15 CAD Indigo gift card covered by the Mesure 15027. The event was recorded and welcomed a more extensive audience, including families, school administration, school students and teachers, and a representative from the EMSB communication department. A newsletter about this event has been written and posted on the EMSB website by the Communication Department.

The newsletter can be found at: https://www.emsb.qc.ca/emsb/articles/roslyn-and-willingdon-elementary-learn-fundamentals-of-public-speaking-through-interschool-debate

Recommendations for future debate programs

- Extend the time slot from 1 hour to 1 hour and 15mins
- Expand the schedule from 13 weeks to 15 weeks
- Ensure the debate class is taught in a quiet room equipped with a Smartboard with a working laptop and internet connection
- Ensure students nominated are strong readers, active participants in class discussions, and able and willing to commit to time and work expectations.
- Grade 6 participation in this program
- In-person final debate completion
- Field trip to Ottawa to view a debate within the house of parliament

Please fine below the grade 4/5 students who participated in this program and are recommended to continue with it next year (if their grades allow).

- Nguyen Binh Minh Apple
- Taiya Bernard
- Elliot Bourque Seamone
- Corina Cowper
- Alison Driver
- Zoe Flanagan
- Caitlyn Kemp
- Violet Lamoureaux
- Karl Andrzej Muller
- Eva Nuselovici
- Jaya Pasquero
- Hannes Schober
- James Stephens

- Louise Sullivan
- Nikki Fraser Ubhi
- Felix Elliott Wiltshire
- Remy Yoo
- Ashton Avsker

Let's Talk Science Competition
(1.5h/ Weekly February-May 2022)

Since 2005, Let's Talk Science Challenge offers to Canadian youth (Grades 6-8) with an interest in science the opportunity to engage in enrichment challenges related to technology, engineering, and math (STEM). Specific benefits associated with engagement in LTSC include:

- Provides an outlet for students who are not being challenged by the curriculum
- Inspires students to consider future education in STEM and potential STEM careers
- Enriches curriculum in eight subject areas: Biology, Chemistry, Earth Sciences, Engineering & Technology, Environmental Sciences, Math, Physics and Space Sciences
- Emphasizes team collaboration, cooperative learning, and problem-solving skills

Through engagement in STEM enrichment challenges students developed key skills including:

- Creativity
- Critical analysis
- Teamwork
- Initiative
- Communication
- Problem solving
- Independent thinking
- Digital literacy

During the 2021-2022 school year the Let's Talk Science Challenge was offered solely virtual. The Play and Learn Weekly activities were conducted under the guidance of a mentor with the scope of helping students prepare for the final competition. The Let's Talk Science Challenge included three components:

- The theory component with the weekly quizzes leading to the Final Question and Answer Competition
- The hands-on component with multiple Design and Build Challenges that help students prepare for the Final Engineering Challenge
- The team spirit component with the Above and Beyond badges and the Lorna Collins Spirit Award.

Eight bright students in grade 6 (selected by Dr. Usher, Kathleen) with a great interest in sciences formed the Willingdon School's delegation. The six students were Hayley Honsberger, Lucas (Amaru) Viereck Lapaix, Ezra Deutsch, Filippo Navarra, Maggie Majaury, Zoë Lam, Luc Bisaillon and Kaya Cowper. Each participating student was awarded a $15CAD Indigo gift card covered by the Mesure 15027.

Willingdon's achievements during the Let's Talk Science Program

ABOVE AND BEYOND AWARDS (enclosed Flipgrid videos):
Each week between February 14 and April 25, students participated in fun interactive quizzes and submitted videos for design and build challenges. Below are the winners of the weekly Above and Beyond awards for these events:

ABOVE AND BEYOND AWARDS (enclosed are their Flipgrid videos):

Willingdon's Team Vulcan, Boat 2: https://flipgrid.com/s/2m-UsjjnzMC5

Environmental Sciences (soil sampling)
Ezra Deutsch, Amaru Viereck Lapais and Filippo Navarra:
https://flipgrid.com/s/qhGZvWQFN2fz

Space Sciences (climate satellite)
Willingdon's Team Vulcan: https://flipgrid.com/s/LCt6oTyHSSGD

Participation in Lorna Collins Award (Flipgrid video)
Willingdon School - https://flipgrid.com/s/DJECudSTP7yX

Participation in the Final Engineering Challenge:
Willingdon School - https://flipgrid.com/s/WKwZ4ceGQDyj

The complete details of the 2022 winners of the Let's Talk Science can be found at:
https://letstalkscience.ca/about-us/news-and-media/announcing-2022-lets-talk-science-challenge-winners

Recommendations for 2022-2023

- School administration should communicate any conflict in scheduling in advance so alternate plans can be made
- There is a need for a dedicated room with smart board and audio system
- Communicating directly with the parents through a weekly email
- Select students who can work independently and who are excited to learn and participate – some students were not engaged and seemed to simply be enjoying their time out of the classroom. These students were disrupting those who were participating well.

- Plan a field trip to the Planetarium / Insectarium / Biodome / Cosmodome / Science Center

Report Completed
Date: August 31, 2022
By: Camelia Birlean

Camelia Birlean, M.Ed., PhD
Consultant, Gifted and Exceptional Learners
English Montreal School Board
Tel: 514-483-7200 / EXT: 7615
Fax: 514-483-7460
Email: cbirlean@emsb.qc.ca