Enrichment Program Report Roslyn Elementary School 2022-2023

One specific aim of the Gifted and Exceptional Learners' mandate for the 2022-2023 academic year was *Matching Instruction with Needs* through 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 Roslyn Elementary School, we successfully designed (or adopted) and implemented *four school-wide enrichment programs*, namely--Mathematics Caribou International, Public Speaking and Debating Junior, one competitive component of The Future Problem Solving International, specifically-the Global Issues Problem Solving, and finally The Battle of the Books Jr. Our programs involved a *total of 82* students (Grade 3-6). Roslyn's achievements in each program will be discussed below along with the future enrichment plans for the upcoming school year of 2023-2024.

Caribou Cup: Mathematics (Six contests: Oct 2023-May 2024)

Caribou Cup is an international online math contest, focused on complex problem solving and mathematically reasoning. It contains interactive questions and feature mathematical puzzles rather than strictly knowledge-based questions, it comes with results and statistics available on the evening after the contest, it provides 250 video solutions to selected questions and offers interactive practice access to contests from previous years and detailed written solutions. Its cost of 320.00 CAD--entailing of unlimited School wide access codes--was covered for all selected participants by the Ministry Mesure 15027 (Gifted and Exceptional Learners). It is normally held six times over the school year, typically over 2 days in October, November, January, February, April, and May.

A total of 35 mathematically talented students, grade 3-5 from Roslyn Elementary school joined this competition as of January 2022. Their achievements (rankings) are included in the table below.

It is worth mentioning that some of our Roslyn students not only are doing very well, scoring in the top 5% at the national and international levels, but Oliver Mansour, Grade 4 Roslyn student scored Nr. #1 at the international level in the October Contest.



NAME	GRADE	RANKING (Top within the world)
Felix Potter	Grades 3 & 4	3%
Oliver Mansour		4%
Milton Lui	Total Participating	4%
Theodore Finch	Students: = 17,149	10%
Katie Woodward		10%
Luka Siveski		13%
Eleanor Barrett		21%
Moses Haurestock		21%
Eva Clark		26%
Liam MacKinnon		27%
NAME	GRADE	RANKING (Top within the world)
Aiden Fernandes		3%
Olivia Fernandes		8%
Russell Yuelin Liu		10%
Nicolas Clark		10%
Kate Chaudhury	Creado 5 8 (11%
Alexander Gleason		14%
Austin Fraser	Students = 22,970	14%
Max Kuerti		15%
Tomaz Jecz		15%
Jade Ting Tourillon		16%
Aliah Hedge		17%
Adara Allidina		18%
Aleeza Chowdhury		19%
Anna-Sofia Bastos		19%
Adelaide Bettez		20%
Antoni Jecz		22%
HyeonJun Cho		22%
Louie LeMaistre		24%
Joshua Trent Gustave		32%
Zachary Erbetta		33%
George Langston		45%
Cameron Mossop		45%
Morgane Davies		51%
Luca O'Brien		90%
Noah Lambert		96%

Plans for 2023-2024

Given an appropriate allocation of funds* (to enable the hiring of a resource person) the international Caribou Cup will be extended into an enrichment program offered to mathematically talented students on a bi-monthly basis and facilitated by a mentor. The sessions will include mathematical challenges, interactive math questions and puzzles aligned with the requirements of the Caribou Cup as well as Complex Mathematical Explorations designed by National Council of Teachers of Mathematics (NCTM, VA in collaboration with Dr. Renzulli, J. at Univ of Connecticut).

*NOTE: The funding for the Gifted and Exceptional Learners Dossier has been reduced by 10% for the academic year of 2022-2023.

Examples of Mathematical Explorations include:

- 1. Divide like an Egyptian, in which students are introduced to the Egyptian notations, answer questions of division using that notation, and then make connections to our modern representations. Students also explore a variety of methods for comparing fractions without needing common denominators.
- 2. Demystifying Multiplications Students build models of the operation 27 x 15 and its result in a variety of ways. The activity promotes student reasoning and sense making by analyzing various multiplication algorithms (area models, partial products, lattice multiplication, and the traditional method.
- 3. What's on your Plate? Teachers and students explore various facets of health and nutrition while using mathematics in the investigations of data from government sources on nutrition. Mathematics and mathematical thinking include basic operations, reading and interpreting data from charts and tables, predicting outcomes based on data, and combinatorics.
- 4. Solar System Exploration: *Are We There Yet? A Journey through Our Solar System* helps students use proportional reasoning to build a football-field-size scale model of our solar system. This is a hands-on activity designed to help students experience the vast distances between celestial objects. The activity concludes with students developing a logarithmic scale to help represent the immense distances between planets and other celestial objects in our galaxy.

Junior School Enrichment Program: Debating and Public Speaking (1h/ weekly February-April 2023--Compacted Program)

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. 10 Roslyn students (G4-6) embarked in the Debating program's sessions, which occurred weekly for one period and were coached by a mentor. A complete list of nominated participants in this enrichment program is included on pages 4-5 of this report.

Our program particularly 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 other teams at Roslyn.

The formal title of our debate was: This house believes that homework should be abolished.

This year five schools participated in the Debate and Public Speaking program. Each school engaged in a local in-school debate tournament. The champions of Roslyn Elementary School in-school debate tournament are Ellie-Rose Robichaud, Nicolas Clark and Lea Coletti. The top two scoring teams throughout the EMSB--Willingdon and Dunrae Gardens Elementary--were further invited to debate against each other at Dunrae Garden's Elementary on April 26th.

The teams competing against each other were:

Dunrae Gardens (Opposition): Luca Bandera-Gorman, Noah Bokobza and Adamo Paolitto vs.

Willingdon (Proposition): Louise Sullivan, Bella Flanz, and Violet Lamoureux

Willingdon's team won the final debate. Each winner received a certificate of achievement and indigo gift card of 25CAD value. In addition, all participants were awarded a 15CAD Indigo gift card covered by the Mesure 15027.

The event, (live and via Zoom) welcomed a large audience including other debate competitors (including Roslyn), families, school administration, students, and teachers.

An article about this event was written by the EMSB Communication Department and will be published in the EMSB Express Newspaper and it will also be featured on the Gifted/ EMSB website (currently under construction).

Recommendations for 2023-2024

- Run program for full program length (minimum of 14 classes)
- Invite all school champions to in-person debate competition.
- Host final debate competition on a PED day to prevent students from missing class while also giving an opportunity for parents, teachers, and admin to participate.

Nominated Participants (N =10):

STUDENT NAME
Sezan Haggi-Mani
Laila Moss
Cameron Mossop

Nicolas Clark		
Zachary Erbetta		
Noela Benn		
Ariel Gorham		
Ellie-Rose Robichaud		
Antoni Jecz		
Lea Coletti		

Future Problem-Solving Program International (FPSPI) - Global Issues Problem Solving (1.5 hour / weekly November - March 2023)

FPSPI is a dynamic international program involving thousands of students annually from around the world. Developed in 1974 by creativity pioneer Dr. E. Paul Torrance, Future Problem Solving (FPSI) provides competitive and non-competitive components for today's curriculum via a six-step model which teaches critical and creative thinking, problem solving, and decision making. Student work is submitted electronically, and evaluation and feedback are provided from trained evaluators from FPSPI. Qualified students earn invitations to participate in the annual International Conference (taking place in June 2023 at University of Massachusetts-Amherst).

Four thinking skills taught and modeled systematically to student participants engaged in the program are the corner stones of the Future Problem-Solving process.

- **Creativity** Problem solving situations are set in the future to encourage inventive thinking. Students explore future possibility from the present.
- **Communication** Clear and articulate communication is developed while working with a team and ideas are presented in written and verbal modes.
- **Critical Thinking** Students use analysis to gain an understanding of global issues and to comprehend significant aspects of complex situations.
- **Collaboration** Students work together while learning and applying problem solving skills. Teamwork is nurtured as students advance through challenging and exciting situations.

A total of 16 students from Roslyn Elementary (G4-6) embarked in one competitive component of FPSI, namely the Global Issues Problem Solving program, which occurred weekly for 1.5 hours and were coached by a mentor. A complete list of nominated participants in this enrichment program is included on pages 6-7 of the report.

GLOBAL ISSUES PROBLEM SOLVING (GIPS): employing the Six-Step Process to respond to a Future Scene--a hypothetical scenario set 20-30 years in the future--provided for each topic.

This program enables students to think creatively and explore collaboratively a selected inquiry topic from a diverse range of contemporary global topics culminating in a detailed Action Plan. Entries are authentically assessed and scored by trained evaluators. This program was entered as four teams of four students each.

The 2022-23 topics were:

- E-Waste Practice Booklet
- Digital Realties Practice Booklet
- Robotic Workforce Competitive Booklet
- Throw Away Society Competitive Booklet
- Currency (International Booklet)

Roslyn students participated in 3 GIPS events (1 practice booklet and 2 competitive booklets). Each competition lasted two hours and teams received detailed feedback and scoring for each booklet. Roslyn Elementary participated up until the Affiliate Bowl competition (Topic: Throw Away Society). Nine students from EMSB (Willingdon, Pierre Du Coubertin and Royal West Academy) were invited to participate at the international conference (taking place in June 2023 at University of Massachusetts- Amherst). An event will also be hosted on June 20 by EMSB's central office to celebrate the finalists.

An article about this event was written by the EMSB Communication Department and will be published in the EMSB Express Newspaper and it will also be featured on the Gifted/ EMSB website (currently under construction).

Recommendations for 2023-2024

- Start the program as soon as possible (end of September / early October) to give students the appropriate amount of time to understand the 6 problem-solving steps and adequately investigate the topics.
- Provide a short information session for teachers and administration to help with the student nomination process.
- Only nominate grade 5 & 6 students who are top achievers (across all subjects) and proactive readers, as this program requires a large amount of effort and dedication.
- Depending on topic, provide field trips to places of interest and arrange talks with professionals.

Nominated Participants (N =16):

STUDENT NAME	GRADE
Oliver Mansour	4
Eva Clark	4
Luka Siveski	4
Antoni Jecz	4
Charlotte Raymond	5
Auston Fraser	5
Katherine Chadhury	5
Tomaz Jecz	5
Aleeza Chowdhury	6
Zach Crosbie	6

Oliver Lee	6
Cameron Mossop	6
Ellie-Rose Robichaud	6
Saidie Plama	6
Morgane Davies	6
Aleeza Chowdhury	6

Battle of The Books Junior (BOTB) (1hour / weekly November - May 2023)

Battle of the Books is a reading and trivia competition originally designed for senior school levels and modified and replicated at the junior levels. In this competition, highly motivated students who enjoy reading are offered the opportunity to read through a meticulously curated collection of 10 books ranging from fantasy fiction to historical fiction and engage in battles with students from other schools within the program about the content of the books. This program targeted enriching the academic knowledge and vocabulary of participating students while stirring their love for reading in a fun and engaging manner.

21 ferocious readers selected from grades 4-6 were nominated for this program at Roslyn (see complete list of nominees below). The weekly sessions were guided by a mentor. Collectively the participants covered all ten books while engaging in various activities such as literature circle and brain synthesizer, amongst others, to make meaningful connections to the content. As the weeks rolled along, students were coached on creating trivia questions, which formed part of the larger pool of questions prepared for the competition along with those prepared by their enrichment coach.

Roslyn students participated in an in-house *Battle of the Books* competition and one team of six represented Roslyn Elementary at the final battle of the books. These students showed resilience and determination in ensuring they could 'divide and conquer' strategically. The emerging students from this in-house competition (with three reserve players) represented Roslyn School in the **Final Battle of the Books** against the other three competitor schools, namely--Dunare Gardens, Pierre de Coubertin, and Gardenview.

A Sincere Heartfelt Thank You to Ms. Joanna Genovezos, the Principal of Roslyn's Elementary School and Ms. Mireille Tehbelian, the Vice Principal of Roslyn's School for hosting the final Battle of the Books event! It was held live in the Gymnasium on May 19 and welcomed over 50 guests, including parents and students from the four schools.

Though Roslyn did not place 1st amongst the four schools, their hard work and endless weeks of practice did not go unrecognized. All participating students received an Indigo gift card (15CAD), encouraging them to give more to their reading desires. Subsequently, the main team of finalists and their reserves (see list below) were awarded certificates of excellence that showcased their academic achievements. Additionally, they were offered a set of disguised 30 books for their choosing as a complementary reward to encourage and stimulate fun in reading.

Roslyn Champions include Adara Allidina (Captain and Spokesperson), Lea Coletti, Zoe Taylor, Charlotte Raymond, Noa Mainville, and Louie Le Maistre

Back-Up Competitors: Oliver Mansour, Haider Hanjra, Felix Potter, and Benjamin Bacon

Through engaging in the BOB enrichment program, students develop key skills, including:

- Contextual Understanding
- Communication
- Project Delegation
- Teamwork
- Presentation
- Memory techniques
- Critical Thinking

Nominated Participants in BOTB (N = 21):

STUDENT NAME	Grade
Ellie Barrett	4
Beatrice Audet Marshman	4
Oliver Mansour	4
Theo Finch	4
Felix Potter	4
Henry Charby	4
Moses Hauerstock	4
Aaliyah Samuels	4
Louie LeMaistre	5
Elina Keser	5
Charlotte Raymond	5
Eva Goldwater-Khilkevitch	5
Benjamin Bacon	6
Oliver Lee	6
Zack Crosbie	6
Yeulin (Russell) Liu	6
Haider Hanja	6
Lea Coletti	6
Zoe Taylor	6
Adara Allidina	6
Noa Mainville	6

Plans for 2023-2024

Addressing Student Individual Needs: Differentiation, Acceleration, and Enrichment

As part of our mandate for the Gifted and Exceptional Learners, we will continue to offer support bright and talented students at Roslyn who require additional cognitive stimulation to keep themselves learning and motivated.

When the need for differentiation within one classroom is identified (i.e., a single or a small group of students requiring enriched activities), Dr. Birlean can design/adapt and set up Learning Centers (in various subjects). Learning Centers are differentiation structures located in the classrooms and opened to high achieving students who consistently complete their work well and faster than their average peers. These centers will be monitored on a weekly basis by a member of the Gifted and Talented team.

At the request of school administration, Dr Birlean can also conduct strength assessments for talented or formally identified gifted students (especially those in the cycle 1 for whom school wide enrichment programs are not available). The strength assessment is based on three inventories created for gifted and talented learners by Dr. Renzulli at University of Connecticut and validated by over 30 years of authentic research evidence from schools across the world. This assessment aims to collect data about student interest, learning preferences, and student's preferred ways to demonstrate learning. Outcomes of this assessment inform ways to differentiate teaching, learning, and assessment, specifically by (a) aligning instructional strategies to identified learning preferences, (b) offering alternative assessment that match identified expression preferences, and when differentiation is not sufficient, (c) tailoring enrichment activities that center on learner's interest and learning preferences. When independent enrichment is needed, the student will benefit from a formal alternative program, specifically, a weekly independent enrichment program tailored to student's needs and interest and monitored by a mentor. The process and outcomes of this work are disseminated at the formal Knowledge Fair organized near the end of the school year (usually in May).

Professional Development

Support can be equally offered to faculty at Roslyn. At the request of Roslyn's school administration, Dr. Birlean is scheduled to meet Roslyn's faculty at the end of August (TBD August 23-26 or August 29) to share details about the new menu of the school wide enrichment programs planned for the 2023-2024 school year. Dr. Birlean and her team also offers a series of workshops meant to raise awareness about the needs of gifted and talented students and to equip the faculty with effective tools and strategies for addressing the identified needs of gifted and talented students.

Two Additional School-Wide Enrichment Programs in our Menu for 2023-2024

Let's Talk Science Competition (1.5h/ Weekly) (Grade 6, February-June 2024)

NOTE: This program has been implemented at Roslyn during the academic year of 2021-2022 and resulted in numerous distinctions and awards, including *Second place in the Final Q & A* competition, *Finalist of the Lorna Collins Spirit Award**, along with five *Above and Beyond Awards* for design and build challenges in the topics of Earth and Space Sciences. This year we were not able to implement this program because of lack of resources (i.e., a mentor to run it).

We will start the new school year with three academic success tutors (aka. mentors) two of whom will be hired full time and one part time (10h/week); hence, our expectation that the menu of various enrichment activities could be effectively implemented and monitored.

*Lorna Collins Spirit Award: Renamed to honour the memory of a Let's Talk Science team member, the Lorna Collins Spirit Award was given to the team or individual that showed the greatest spirit, team commitment, fun and creativity. Lorna understood the importance of collaboration and enthusiastically supporting each other - while working hard and having fun!

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 engaging in STEM enrichment challenges, students develop key skills including:

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

The Play and Learn Weekly activities will be conducted under the guidance of a mentor with the scope of helping students prepare for the final competition. The Let's Talk Science Challenge includes 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*.

Destination Imagination Programs

(Costs for participating teams will be covered by the Mesure 15027)

Rationale: to allow younger talented students (including K-3) to participate in our school wide enrichment while being formally taught the six steps of the creative problem-solving process. Through engagement in this program, students will build creative problem-solving skills that are transferable across subjects and to real world situation.

Destination Imagination (DI) offers two competitive programs:

- *Challenge Experience*: DI Challenges are prompts/guidelines for Team creations, designed to teach the creative process. Challenges are open-ended with the goal of allowing Teams to take ownership of their solutions and express them in creative ways.
 - This is DI's flagship STEAM program and is considered the world's most creative competition.
 - Available to all students regardless of grade
 - Timeline: Sept–May

The Timeline:

- ✓ Teams form and begin meeting between Sept and January, and tend to spend 2-6 months developing Team Challenge Solutions and practicing Instant Challenges
- ✓ Teams present their solutions at local tournaments between February and March
- \checkmark Teams that qualify will compete at Global Finals in May

Cost: \$165 USD / per Team (with volume discounts)

- *Digital Open*: The Digital Open is a virtual challenge designed for a flexible learning experience. Each year's challenge requires a creative digital solution teams will develop their unique solution and receive a global ranking.
 - DI's new virtual experience attempts to push the limits of technology.
 - Recommended for students in grades 3-12.
 - Timeline: September December
 - Team members can compete virtually.

The Timeline:

- ✓ Register until September 8, 2023
- ✓ Challenge is released on September 15, 2023
- ✓ Solution submission is on November 9, 2023
- ✓ Appeals deadline is on December 4, 2023
- ✓ Awards Ceremony takes place virtually on December 15, 2023

Challenge Preview:

What happens when a story is told out of order? Will it be chaos or will the pieces come together in the end? A big reveal will help you untangle the tale in this season's Digital Challenge! For this Challenge your team will:

- Create and present a Video Presentation that tells a scrambled story.
- Include a big reveal in the Video Presentation.
- Use a reverse motion scene to enhance the Video Presentation.
- Use a reflection effect to enhance the Video Presentation.

• Create and present one Team Choice Element that shows off the team's interests, skills, areas of strength, and talents.

Cost: \$454 USD / per Team

DI also offers two **non-competitive programs**:

- Early Learning
 - DI's program for young learners
 - Recommended for students in Pre-K through grade 2
 - Two STEAM options: Challenge Experience or Curriculum
- The imagineXperience
 - o DI's program for underserved communities / populations
 - o Project-Based Learning, SEL competencies and AI

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