## Enrichment Program Report Gardenview Elementary School 2022-2023

A 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 Gardenview Elementary School, we successfully designed adapted (or adopted) and implemented three school-wide enrichment programs, namely--Mathematics Caribou International, Public Speaking and Debating Junior, and The Battle of the Books Jr. Our programs involved a *total of 64 students (Grade 2-6)*. Gardenview'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 2022-May 2023)

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 unlimited School wide access codes--was covered for all selected participants by the Ministry Measure 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. It is worth mentioning that some of our Gardenview students scored in the top 6% at the national and international levels.

A total of 36 mathematically talented students, grade 3-5 from Gardenview Elementary school joined this competition as of October 2022. Students' names and their achievements (rankings) are included in the table below.

NAME	GRADE 2	RANKING (Top within the world)
Zayne Boone	<b>Total Participating</b>	37%
NOTE: Zayne participated at	Students = 6,166	
parent request and not by		
teacher nomination.		
NAME	GRADE 3 & 4	RANKING
Aiden Shen-Rong		6%
Ryan Ajersch		9%

Daniel Gamrat		10%
Zachary Iapaoto		11%
Vasili Vitoroullis	Total Participating	13%
Eleanor Cheung	Students = 17, 149	19%
Gabriel Farhat		20%
Zoe Stamatiou		21%
Siena Rose Graziani		21%
Christain Varelas		22%
Kate Liberty		26%
Benjamin Lebel	•	31%
Liam Morin		36%
Evan Chhoun-Pang		40%
Sydney Bafri		42%
Alexander Chirinian		43%
NAME	GRADE 5 & 6	RANKING
Amelia Hodak		7%
Alex Ionata		8%
Niki Adamakakis		14%
Jessica Gamrat	Total Participating	14%
Justin Trinh		17%
Isabella Peluso	Students = 22,971	17%
Markos Karabatsos		24%
Ralph Assadourian		27%
Dylan Scrocco		27%
Mark Matar		30%
Haley Tam		43%
Sabrina Weiss		48%
Zayd Tamer		49%
Milo Fagnard-Berish		50%
Adyson Tsanousas		54%
Nyla Syed		54%
Dylan Tran		60%
Levi Bafri		65%
Jonah Dym		72%

# 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 December-April 2023)

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.

*14 Gardenview students* (G5-6) 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 Gardenview.

### 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 Gardenview Elementary School in-school debate tournament are Annabella Popescu, Naomi Oubadia and Kayla Shaikh. 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, hosted live and via Zoom, welcomed a large audience including other debate competitors (including Gardenview), 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 (vol. 27 | N° 1 | Fall 2023) and it will also be featured on the Gifted/ EMSB website (currently under construction).

Recommendations for 2023-2024

- Run program for full program length (Sept/October April)
- Run program during school class time and not during lunch. This will reduce interruptions and students missing debate class.
- 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 =14): STUDENT NAME

STUDENT NAME
Emmanuel Poseorsky
Stephanie Kormas
Olivia Tseles
Zayd Tamer
Mikaela Cichi
Naomi Morin
Luigi Gallucci
Annabella Popescu
Naomi Oubadia

Kayla Shaikh
Kiara Armstrong-Fagan
Dimitrious Segounis
Sam Sabbah
Andreaus Manousos

## Battle of The Books (Junior) 1 hour/weekly – (October to 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: (a) read through a meticulously curated collection of **10 books** varying in genre from fantasy fiction to historical fiction and (b) 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.

*14 ferocious readers*, grades 4-6, were nominated to participate in this program guided by an academic mentor. Over the weeks, these selected readers collectively 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, including those prepared by their enrichment coach.

Given that the required number of players per team was 6, Gardenview students participated in an in-house competition to determine **the representing team** for the final battle. These students showed resilience and determination in ensuring they could 'divide and conquer' strategically through continuous practice. The emerging students from this in-house competition (with three reserve players) represented Gardenview School in the **Final Battle of the Books** against the other three competitor schools, namely-- Roslyn, Pierre de Coubertin, and Dunare Gardens.

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.

Gardenview placed 2nd among the four schools, result of their hard work, perseverance and endless weeks of practice. All participating students received an Indigo gift card (15 CAD), encouraging them to give more to their reading desires. The participants were also awarded certificates of excellence showcasing their academic achievements. Additionally, all schools

were collectively presented with a set of disguised 30 books for their choice as a complementary reward to encourage and stimulate fun in reading.

*Gardenview Champions* include Sara Romeo (Captain), Zoe Manoliadis (Spokesperson), Ariel Deyirmendjian, Liam Shaw, Lok Wah Lauren Siu, Siena Rose Graziani.

Gardenview Back-Up Competitors: Daniel Gamrat, Nathaniel Chan, Tayeb Benarfa

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

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

Battle of The Books was a very engaging and creative way to get students involved and excited about reading. We recommend holding this event for the incoming years with stronger principles governing students' attendance and general conduct. Additionally, we suggest not scheduling the sessions during lunch or recess periods as such overlap creates distraction during the session period.

Nominated Participants in BOTB (N = 14):

STUDENT NAME
Adam Omar Hossein
Anastasios Evan Pampoukas
Ariel Deyirmendjian
Daniel Gamrat
Jessica Gamrat
Liam Shaw
Lok Wah Lauren Siu
Nathaniel Chan
Sara Romeo
Siena Rose Graziani
Tayeb Benarfa
Zayd Tamer
Zoe Manoliadis
Zoe Stamatiou

## 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 Gardenview Elementary School, 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 Gardenview. I also welcome the opportunity to share details about the new menu of the school wide enrichment programs planned for the 2023-2024 school year with the administration and faculty during a lunch and learn or a staff meeting. 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.

## Three 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 in some of our EMSB schools during the academic year of 2021-2022 and resulted in numerous distinctions and awards, including 2<sup>nd</sup> place in the **Q&A Competition**, along with numerous *Above and Beyond Awards* for design and build challenges in related STEM topics (e.g., Earth and Space Sciences, Physics, Chemistry).

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*.

## **Future Problem-Solving Program International (FPSPI)**

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 (FPS) 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. FPS can be used as part of classroom curriculum, an extracurricular activity, by individuals or clubs. Student work is submitted electronically, and evaluation and feedback are provided from FPSPI. Qualified students earn invitations to participate in the annual International Conference (held 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.

Four Components of FPSI available include:

**GLOBAL ISSUES PROBLEM SOLVING (GIPS):** employing the Six-Step Process to respond to a Future Scene 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. Topics for 2023-2024 include:

- Tourism
- Urbanization
- Antarctica
- Autonomous Transportation

Participants research a chosen topic and apply FPSPI's six-step problem solving process to resolve the Future Scene -- a hypothetical scenario set 20-30 years in the future. Culminating in a detailed Action Plan, entries are authentically assessed and scored by trained evaluators. Students invited to the international conference will also complete booklets while on-site. This program can be entered as **teams of 3 to 4 students** or **individuals**, taught by a coach (i.e., the school librarian in collaboration with a mentor funded by the Gifted and Talented Mesure at EMSB). **COMMUNITY PROBLEM SOLVING (CMPS):** Students identify an Area of Concern from their own community to examine over the course of the school year. Projects are developed and implemented utilizing the Six-Step Process.

**SCENARIO PERFORMANCE (SCP):** Students develop and perform an oral story of up to 5 minutes, based on their future projection of one of the annual topics. **SCENARIO WRITING (SW):** Student authors write an original 1500-word piece of fiction projecting their choice of one annual topic into the future.

# Destination Imagination Programs (K-Grade 3)

(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: SkillFire Program**

*SkillFire* has four main components meant to introduce students to certain skills, then enforce and build on those skills in a meaningful way. Each component is a **digital download** that you can start using right away and includes a free scheduling guide.

SkillFire reinforces:

- Teamwork
- Communication
- Creative Thinking
- Dramatic Play
- Self-Expression
- Project Management
- Material Properties
- Resource Awareness
- Literary Analysis
- Research
- Technical Design
- Goal-Setting
- Improvisation

## SkillFire is...

- For students from Kindergarten through Grade 4
- Available at any time of year and on any schedule
- Not a tournament or showcase based program

The *SkillFire Handbook* includes 16 sessions, each lasting 45-60 minutes each, to introduce key skills. Along with facilitator instructions, each session is broken into two activities:

- Skill Starter: a team-building activity to introduce new concepts.
- Skill Builder: a longer activity to reinforce learning.
- Cost = \$199 (covered by the Mesure 15027)

*SkillFire Skill Extenders* includes 3 medium-length activities for more detailed skills practice and can be completed in a total of 2-5 hours, or over several days:

- Skill Extender 1: Performance-based
- Skill Extender 2: Task-based
- Skill Extender 3: A hybrid activity that is both performance- and task-based
- Cost = \$59 (covered by the Mesure 15027)

The *SkillFire Skill Master* is a longer Challenge for use as a long-term project. The Skill Master will reinforce technical and artistic skills, or you can choose to focus on just one skill set. The Skill Master can be solved in a total of 5-7 hours, or over several days – but longer timeframes can lead to more elaborate solutions.

• Cost = \$39 (covered by the Mesure 15027)

The *Capstone Event Kit* is a resource for presenting an interactive assembly to serve as a celebration and/or awards ceremony for your SkillFire students.

• Available early 2024

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