

Elementary Math
Focus Project Report

November 2022

Under the auspices of the LCEEQ Professional Development Subcommittee (PDSC), in collaboration with the Mathematics, Science and Technology Committee (MaST), made up of the Math and Sciences Subject Consultants, the **Elementary Math Focus Project (EMF)** was initiated as a pilot project in August 2015. More than one hundred teachers and Mathematics Consultants from across the province were invited to participate in an intensive four-day residential professional development session held at Manoir St. Sauveur. The pilot originated from a proposal to offer a three-summer training to Elementary Math teachers. The pilot was conducted to ascertain whether the proposed animation team would be well-suited to meet the goals of the project.

Dr. Juli Dixon, University of Central Florida, one of the founders of DNA Mathematics (<http://www.dnamath.com>) and three of her colleagues were engaged to animate the workshops. The experience proved to be very successful. As a result, the three-year training model originally conceived was therefore fully endorsed by the community and LCEEQ. Participants in the pilot were invited to make a commitment for the subsequent two summers. Seventy percent agreed and have affectionately been known as “Cohort One” ever since.

School Boards/Associations were invited to commit to a long-term training model that would see participants attend sessions over three summers. In addition, participants would be provided with a minimum of two professional days of training by the local Consultant(s) during the regular school year following each of the summer sessions.

The original model designed to include three Cohorts of teachers would have seen the project continue through 2020. An agreement was reached with DNA Math, to deliver:

Summer 2015	Cohort One	Pilot	
Summer 2016	Cohort One	- Year Two	Introduce Cohort Two
Summer 2017	Cohort One	- Year Three	Cohort Two – Year Two
Summer 2018	Cohort Two	- Year Three	Introduce Cohort Three
Summer 2019	Cohort Three	- Year Two	
Summer 2020	Cohort Three	- Year Three	

Following the Summer 2016 workshops, the original plan was altered to introduce Cohort Three a year earlier to take advantage of the enthusiasm within the community. It must be noted that school teams were encouraged, thus opening the possibility of administrators joining the training process. The amended schedule became:

Summer 2017	Cohort One - Year Three	Cohort Two – Year Two	Introduce Cohort Three
Summer 2018	Cohort Two - Year Three	Cohort Three – Year Two	Introduce Cohort Four (including a Grade 8-9 strand)
Summer 2019	Cohort Three - Year Three	Cohort Four – Year Two	Introduce Cohort Five
Summer 2020	Cohort Four – Year Three	Cohort Five – Year Two	Introduce Cohort Six

Due to restrictions related to COVID-19, the plan was to simply transfer the Summer Institute to Summer 2021. Regrettably, the restrictions continued making it necessary to delay the process an additional year. The Math Summer Institute process did reconvene in August 2022.

The planning and organization of the Math Focus Project is the responsibility of the LCEEQ Professional Development Committee. Members of the **Math Focus Organizing Subcommittee:**

- Daphne Amster, Teacher, and Graduate of the EMF Project (term ended in June 2022)
- Carole Bamford, Teacher, Riverside School Board
- Cheryl Cantin, Ministry of Education, DSREA.
- Danielle Chaput, Math Consultant - Central Quebec School Board
- Jeff Harvey, Math Consultant – Western Quebec School Board (term ended in June 2022)
- Vanessa Rayner, Math Consultant – Sir Wilfrid Laurier School Board
- Nathalie Roy, Teacher, St George’s School of Montreal representing QAIS/AJDS
- John Ryan, LCEEQ Coordinator

During the 2021-2022 academic year the Committee convened six meetings via ZOOM.

Three new members have joined the Committee:

- Helena Bates, Teacher Eastern Townships School Board
- Jessica Prior, Teacher Eastern Townships School Board
- Aliya Somani, Consultant English Montreal School Board.

In order to maintain the momentum, LCEEQ offered a series of webinars during the Summer of 2021, as well as, during 2021-2022 school year. In August 2022, we were able to convene an in-person Math Summer Institute.

Webinars were accessible to all teachers: those who had previously participated in a Summer Institute, as well as those teachers interested to know more about the process and to further their own professional development but who had not previously had the opportunity to be part of a Summer Institute Cohort. All of these webinars were animated by members of the DNA Team.

LCEEQ also offered four webinars led by our own local experts:

- **Jeff Harvey**, Math Consultant fore the Western Quebec School Board and **Zak Likely**, Consultant for the Eastern Shores School Board presented a webinar for Cycle I and II Elementary teachers
- **Cathy Martin** and **Tina Morotti**, Consultants with the Riverside School Board presented a webinar for Secondary teachers
- **James Gore**, a Consultant with the Sir Wilfrid Laurier School Board presented a webinar for Elementary Cycle III and Secondary
- **Danielle Chaput**, Central Quebec School Board and **Jodi Coleman**, Eastern Townships School Board, presented a webinar for Elementary Cycle II and III teachers

Given that the Math Focus Project now includes the Secondary Level, **Peter Liljedahl**, author of **Building Thinking Classrooms** was engaged to give four webinars. Two were scheduled in the Spring of 2022 with the balance scheduled for the start of the 2022-2023 academic year.

Included here is a list of all the sessions offered, including a link for the feedback provided by the participants which serves as a report of the individual sessions:

August 2021 in lieu of an in-person Summer Institute:

Session for Teachers with Math Summer Institute Experience:

- | | |
|----------------|--|
| August 2, 2021 | Engaging in the TQE process for Grades 5-7 - focus on fractions, ratios, rates, and percentages
Ed Nolan (90 mins) |
| August 3, 2021 | Engaging in the TQE process for Grades K-2 - focus on estimating and graphing
Thomasenia Adams (90 mins) |

- August 3, 2021 Engaging in the TQE process for Grades 3-4 - focus on estimating and graphing
Juli Dixon (90 mins)
- August 5, 2021 Engaging in the TQE process for Grades 3-4 - focus on estimating and graphing
Juli Dixon Resource Teachers (90 mins)
- August 5, 2021 Engaging in the TQE process for Grades 7-9 - focus on the Pythagorean Theorem, perimeter, area,
surface area, and volume
George Roy (90 mins)

[Link](#) to the Composite Evaluation Report

Session for Teachers with NO Math Summer Institute Experience:

- August 4, 2021 Engaging in the TQE process for Grades K-2 - focus on estimating and graphing
Thomaseia Adams (90 mins)
- August 4, 2021 Engaging in the TQE process for Grades 3-4 - focus on estimating and graphing
Juli Dixon (90 mins)
- August 6, 2021 Engaging in the TQE process for Grades 8-9 - focus on fractions, ratios, rates, and percentages
Ed Nolan (90 mins)
- August 6, 2021 Engaging in the TQE process for Grades 8-9 - focus on the Pythagorean Theorem, perimeter, area,
surface area, and volume
George Roy (90 mins)

[Link](#) to the Composite Evaluation Report

Webinars - Winter/Spring (full day)

Grades 3-4	February 11, 2022 and April 6, 2022	Juli Dixon	
	Evaluation report February	Evaluation report April	
Grades 5-7	February 22, 2022 and March 29, 2022	Ed Nolan	
	Evaluation report February	Evaluation report March	
Grades K-2	February 23, 2022 and April 5, 2022	Thomasenia Adams	
	Evaluation report February	Evaluation report April	
Grade 3-4	February 23, 2022	Juli Dixon	Evaluation report
Resource Teachers	March 31, 2022	Juli Dixon	Evaluation report

Locally Animated Sessions – Spring (full day)

Situational Problems: More than Summative Assessments

Elementary Cycle 1&2 March 28, 2022 **Jeff Harvey and Zak Likely**
[Evaluation report](#)

From Arrays to Quadratics

Secondary April 4, 2022 **Cathy Martin and Tina Morotti**
[Evaluation report](#)

Creating a Classroom Environment for Engaging Mathematics

Elementary Cycle III and Secondary April 28, 2022 **James Gore**
[Evaluation report](#)

Five Practices for Orchestrating Mathematical Discussions

Elementary Cycle II and Cycle

May 19, 2022

Danielle Chaput and Jodi Coleman

[Evaluation report](#)

Dedicated for Secondary Teachers: (full day)

Building Thinking Classrooms - Part 1 of 4

April 19, 2022

Peter Liljedahl

[Evaluation report](#)

Building Thinking Classrooms - Part 2 of 4

May 10, 2022

Peter Liljedahl

[Evaluation report](#)

Summer Institute - August 2022

Resuming the usual practice, three Cohorts of teachers participated in the Summer Institute. **Cohort 4** completed the third of a three-year commitment, **Cohort 5** completed the second year, and **Cohort 6** began a three-summer cycle. Two hundred thirty teachers benefited from this PD opportunity.

Following their session each Cohort was asked to complete an on-line evaluation of their experience:

Cohort 4 [Evaluation report](#)

Cohort 5 [Evaluation report](#)

Cohort 6 [Evaluation report](#)

Support for Consultants

LCEEQ continues to offer support to Math teachers, but it is also important to provide professional development and support activities to the Consultants who are charged with the responsibility of supporting the ongoing projects throughout the school year. To this end Math Consultants were invited to participate in four webinars led by Ainsley Rose (January, February, April, and May) . The approach that has been adopted is one of “accompaniment” whereby the focus of each session is more on coaching than on mathematics content.

The Consultants were also provided with a one-day webinar with **Peter Liljedahl** in which he focused on strategies that can help teachers in their attempts to adopt the concepts of “Building A Thinking Classroom” The Evaluation Report for this session can be found [here](#).

The Math Focus Project continues to be well received by teachers and the School Boards/Associations. The Organizing Committee has scheduled some thirty webinars during the 2022-2023 school year and is presently planning for the Summer Institute at Manoir St. Sauveur during the first week of August 2023 for Cohort 5 and 6.