

Elementary Math Focus Project Report

September 2020

Submitted to LCEEQ
Prepared by John Ryan,
LCEEQ Coordinator

Under the auspices of the LCEEQ Professional Development Subcommittee (PDSC), in collaboration with MaST, the Mathematics, Science and Technology Committee, 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

The planning and organization of the EMF Project is the responsibility of the LCEEQ Professional Development Committee. The present members of the **EMF Organizing Subcommittee**:

- Daphne Amster, Teacher, and Graduate of the EMF Project.
- Cheryl Cantin, Ministry of Education, DSREA.
- Jeff Harvey, Math Consultant – Western Quebec School Board
- Erica Lamothe, Teacher, and Graduate of the EMF Project.
- Lisa Lorenzetti, Cycle 3 Elementary Math Teacher at The Study School representing QAIS/AJDS and facilitating the training for these Associations
- Vanessa Rayner, Math Consultant – Sir Wilfrid Laurier School Board
- John Ryan, LCEEQ Coordinator

During the 2019-2020 academic year the Steering Committee convened six meetings – four in-person and two via ZOOM.

Given the limitation on gatherings as a result of COVID-19, the regular programme that was scheduled for August 2020 was rescheduled to the first week of August 2021. Arrangements with both the DNA Team (facilitators) and the location (Manoir St Sauveur) have been finalized for such. Since Cohort 4 and Cohort 5 participants had already made their reservations with the Manoir, their confirmations will simply be transferred to August 2021 meaning that there was no need to reregister with the hotel.

Since the bedroom bookings were not yet done for Cohort Six since the pandemic disrupted the established timeline for such, the room reservation process will be initiated in Fall 2020 with a target date for completion prior to the end of the calendar year.

In order to maintain the momentum, LCEEQ offered a series of webinars during the first week of August 2020. Participants from Cohorts 1 through Cohort 5 were invited to participate in a ninety-minute online workshop which focused on how to promote the strategies that participants had learned when teaching Math in a virtual setting. The sessions were offered in Grade Bands and were limited to thirty-five participants each so as to include interaction. Participants were welcome to attend sessions at more than one Grade Band as long as space was available.

The workshops were offered as per the following schedule:

Grade K-2	Monday, August 3, 2020	9:30 – 11:00 and 1:30 – 3:00	Animator: Thomasenia Adams
Grade 3-4	Tuesday, August 4, 2020	9:30 – 11:00 and 1:30 – 3:00	Animator: Juli Dixon
Grade 5-7	Wednesday, August 5, 2020	9:30 – 11:00 and 1:30 – 3:00	Animator: Ed Nolan
Secondary	Thursday, August 6, 2020	9:30 – 11:00	Animator: George Roy

Since Cohort 6 had not yet been introduced to the underpinnings of the conceptual Math concepts presented by the DNA Team, a special session was organized to introduce such. Other teachers who were not registered for Cohort Six but were interested in knowing more about the project were also welcomed. The ninety-minute overview session was offered by **Juli Dixon** on the Friday morning.

There were four animators needed to accommodate eight webinars. The cost for animation was **\$19 586.60 (CAN)**

At the end of each Summer Institute the Math Focus Organizing Committee reviews feedback provided by participants gathered in an on-line survey. The response to the August 2020 questionnaire was most encouraging with a 70% response rate. The compiled results of the survey are found in the Appendix of this report.

As a sign of appreciation to those who completed the survey, participants who wished to be included in a random draw were asked to identify their feedback. Two fifty-dollar gift cards were awarded. The lucky winners chosen at random were:

Christa Manuel Blanchette



Christa is a Cycle 1 Reading & Math Coach at Shawinigan High School for the **Central Quebec School Board**.

Marie-Catherine Nault



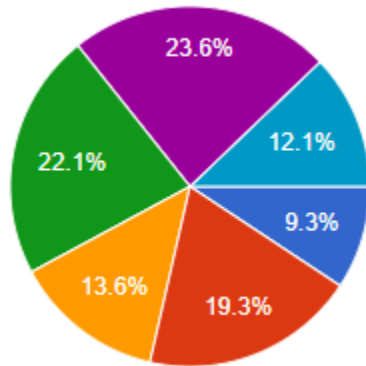
Marie-Catherine teaches Grade 5 at **Parkview Elementary School** in Granby (Math, ELA, French, Art, Drama) for the **Eastern Townships School Board**

Congratulations to both winners!

Appendix A

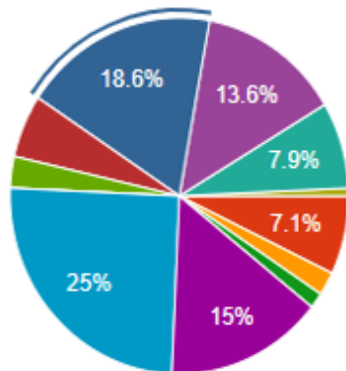
Compilation of the results of the on-line survey
following the webinars.

Please indicate which cohort you are part of:



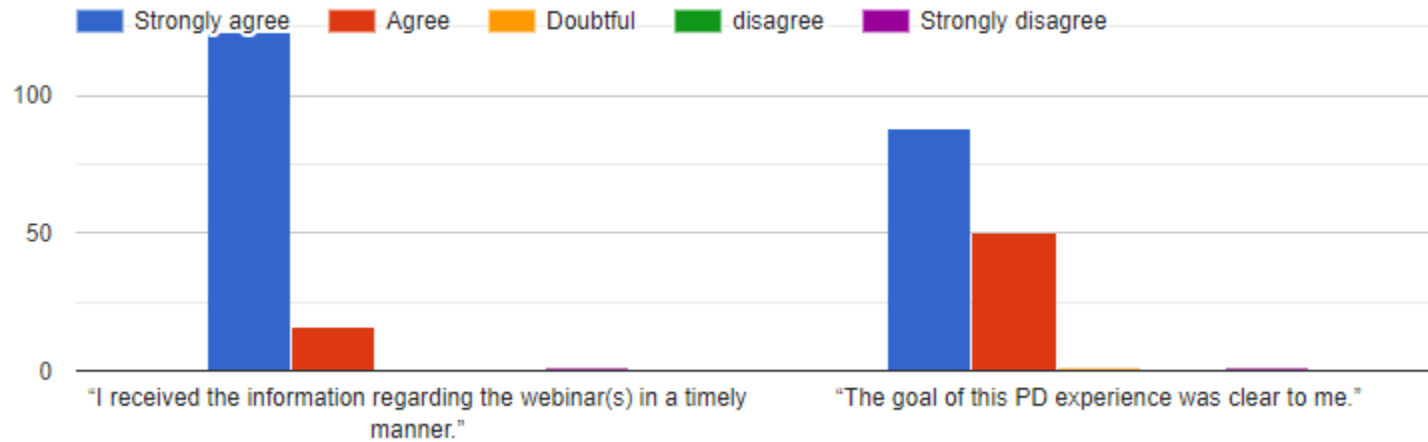
- Cohort 1 (Started August 2015)
- Cohort 2 (Started August 2016)
- Cohort 3 (Started August 2017)
- Cohort 4 (Started August 2018)
- Cohort 5 (Started August 2019)
- Cohort 6 (will begin August 2021)

Please indicate which Board/Association you are affiliated to

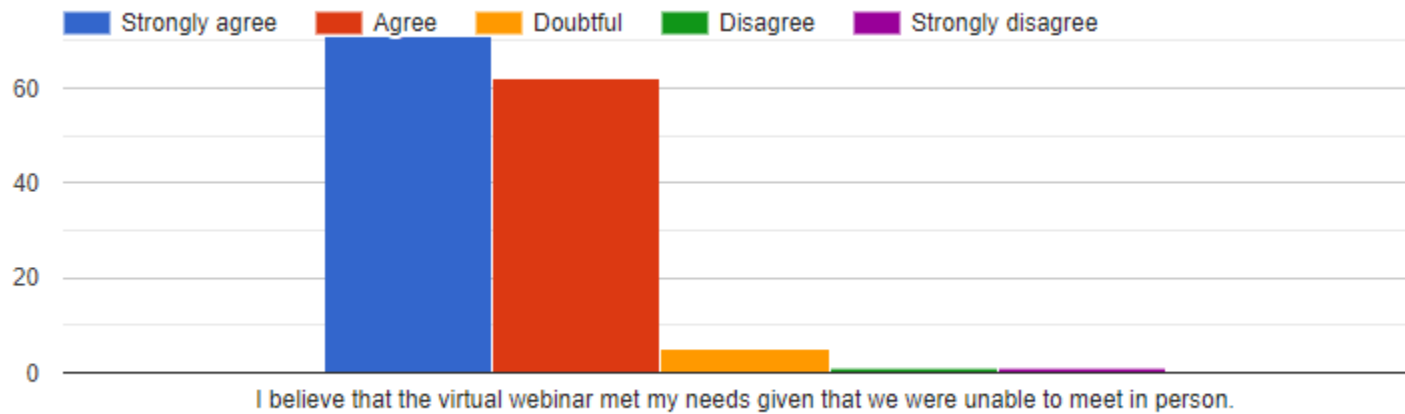


- Association of Jewish Day Schools (A...)
- Central Québec School Board (CQSB)
- English Montreal School Board (EMSB)
- Eastern Shores School Board (ESSB)
- Eastern Townships School Board (ET...)
- Lester B. Pearson School Board (LBP...)
- Littoral School Board (LSB)
- New Frontiers School Board (NFSB)
- Québec Association of Independent Schools (QAIS)
- Sir Wilfred Laurier School Board (SWLSB)
- Riverside School Board (RSB)
- Western Québec School Board (WQSB)
- Ministère de l'Éducation

Please indicate to what you what extent you agree or disagree with the following two statements:



Please indicate to what you what extent you agree or disagree with the following statement:



What was the strength of the virtual session

Demonstrating how various topics can be taught using the ZOOM platform. (x 4)
Easy to follow, engaging, use of breakout rooms
We were able to cover a manageable amount of content and focus on essentials.
The focus on how to teach math in this new digital age
The use of different online features, first-hand, was an excellent idea.
Demonstration by the presenter and our engagement in tasks.
The little group meetings to continue to work sharing ideas and explanations was good; an extension to what I previously learned during my cohort (mental computation); the tasks; being able to continue to learn with Thomasenia (she is wonderful).
The experiences used and using poll, breakout rooms, and google docs
The presenter explained really well
That Miss Adams use the different technology to share the information so we could see it! And we were able to discuss in small groups.
Great reminder of all that we have been learning at the summer institute and was good model for how this approach can be used if we are teaching virtually
It was great. The smaller group setting was nice too.
Demonstrating how to go about using technology as a tool if needing to teach remotely and how we can make our teaching just as rich as one would in person
Letting students find their own strategies to understand certain concepts.
Developing technology skills and resources
Gaining new food for thought in ways to approach math with my students. Statistics in particular.
I felt similarly to how I do when we meet in person, which is quite a feat! I felt like my thinking was challenged and I was able to work through problems, ask questions and come away knowing a little more.
I loved that we were still able to have rich discussions and examples we went through were very clear.
Being able to see what it looks like as a student. To show us that we can have rich online discussions and really still work the 5 shifts in remote learning.
It provided: 1) tips for using technology in our current context (whether teaching remotely or in the classroom with distance); 2) a good refresher on the TQE process and how to facilitate discourse and questions for students

Presenters provided excellent examples of experiences that could easily be done in a virtual classroom.

Giving us ideas of how to apply the strategies we learned in St-Sauveur through online teaching.

Juli's ability to demonstrate the different types of ways of using on-line teaching

Even though the session was virtual, the presenter succeeded in making it feel dynamic and more engaging as opposed to simply listening to a speaker.

Juli kept the session engaging by having us doing and focusing on different tasks (polls, google docs, breakout rooms etc.)

The breakout groups were a great option. Thomasenia used the technology to its full extent.

Presenter was clear; there were different opportunities to participate and discuss.

The presenter was accessible, prepared to answer and discuss math content as well as instruction

Apply the TQE process in the online setting

The behind the scene look at how they make it happen and the breakout room experience

I found an area of teaching that I could focus on for the upcoming year. Learning how to revamp your way of teaching is overwhelming so I tend to focus on 1-2 new things. In the meantime I have forgotten things I learned because it's been a few years. I'm glad I could refresh my knowledge.

That the group was not too large. Allowed for comments and questions from everyone without the workshop dragging on.

Able to see that lessons could be done in breakout rooms. Students will more likely participate more in these smaller groups online.

That we were able to see how we could use the in-class strategies on a virtual platform.

Giving us hands on experience with best practices for distance learning

How we can get students participating in breakout room through a google link

Giving a workshop using the very techniques we were being taught about, specifically online teaching techniques.

Juli Dixon! She speaks clearly, makes her points well, and is engaging.

Tips for virtual teaching

All the tips the instructor gave about teaching through virtual methods

Juli modelled exactly what I was there to get information on...how to implement the TQE process while teaching online.

Conversing despite not being together physically

No technical issues, presenters were familiar with technology being used. Presenters were well prepared.
It was very well organized and had a very good flow. I enjoyed the breakout sessions, never having done this before.
Thomasenia was an excellent on-line teacher! She was a great model.
Since virtual learning is new to many educators it was nice that the Math Speakers were showing us various ways to make learning still meaningful but through an online format!
Good length for engagement, good example of how to use tools for distance learning, going through the experience and design process.
The goals were clear. The chunks were well balanced. The distance element was appreciated.
Interactive, kept my attention, and easy activities to integrate in the classroom.
Everything can be directly applied to our work with the students.
I was impressed at the use of tools for engagement and that we were actively participating in discussions!
The presenters gave a behind the scenes view of how the virtual session was created.
Very Strong. Ed was just as amazing virtually as he is in person.
Learning some ways to bring lessons hands on in a virtual world.
Well organized plan with a good flow.
Seeing presenters in action who are adept at using Zoom.
Review of the instructional shifts through tasks and academic talk all demonstrated through the online platform.
In addition to a quick revision of the mathematical TQE process and some grade level concepts, the virtual session offered ideas and tips on how to make the most for distance learning.
The presenters were dynamic and shared the nature of the tech tools they were using to connect with us. The presentations were, as always, engaging and thought-provoking.
Finding appropriate tasks to support the learning goals and identifying strategies to facilitate effective instructions in remote settings.
Well planned and organized. A good example of what a virtual session should be.
I loved the fact that they presented tools that could be brought back to the classroom or visual learning what ever the case may be
It was interactive, relevant, modelled the TQE process online, and was well planned.
Speaker was clear and helpful

Sharing of how virtual lessons can be used to engage students. Ed as usual was amazing.
Demonstrating the ability to teach well and do the TQE process even with the virtual challenge. We can do it too!
Learning virtual ways to teach math in an engaging way.
I really enjoyed the activities and the break out session.
I was able to come away with some activities that I will be able to use in my class this year.
Dr. Nolan's experiences. Great modelling for the upcoming school year. His tasks are always thought provoking.
The technology functioned very well. Very clear and well done.
Communication / technology was very well understood and organized. Ran on time etc.
Interactive
The poll to keep our attention. Sharing/working in group. Reflect on ways to solve a problem.
Modeling of strategies in a digital setting
Served as a refresher and it was a great starting point to get ready for the new year. Good modeling.
How we can get students participating in breakout room through a google link
Reconnecting with fellow math colleagues and talking about the challenges and solutions to teaching math on a digital platform.
Modeling of how to do tasks with student virtually. Connecting with educators.
It was well set up with all aspects (chat, breakout rooms, google docs, etc.)
Helped serve as a refresher for some concepts.
It modelled the challenges faced by teachers with online learning and reviewed the 5 shifts in teaching practice
Although there were fewer group discussions because of the context of the virtual session, this led us to being able to complete all of the tasks in the timeframe we had. Breakout sessions were also used wisely to interact with one-another and the slides were clearly represented.
Learning virtual ways to teach math in an engaging way.
Revoir les gens, discuter de mathématique et d'apprentissage, être dans l'action
Being able to see and hear everyone's response clearly without obstructions or distractions. Also not having to travel!
The strength is the way the learning experience was delivered; the presenters showed us how we could do math virtually. I learned how to deliver the DNA way of teaching math in a virtual setting. They taught us how we can conduct polls, use multiple-choice questions and put students in

groups to do math. I found what I have learned would engage my students. As well, I learned how to evaluate students' learning in a virtual setting.

Given the fact that we have learned the DNA way of teaching math, I was worried that I would not be able to replicate it properly on an online learning platform. However, the presenters showed us how that could be done. In fact, learning how I can evaluate students' learning was valuable. I feel prepared and excited to teach math in-person or virtually. I love their use of a document camera in a virtual teaching!

I had the opportunity to attend two different sessions. Thank you so much for the invitation!

Gave me some good insight into teaching virtual, should the need arise again, and also gave me the opportunity to interact with colleagues, which helped reduce my anxiety quite a bit.

Different material (higher math); when I started in August 2016, I was placed in the highest math, which I believe was Grade 6-7.

We were provided with some strategies to reach ALL learners, especially in an online teaching/learning environment

How George models the 'teacher/guide' behavior.

Thinking about the different strategies students can come up with.

Making connections with what students know and math concepts. Enjoyed the entire session.

It was good

The breakout rooms were a great feature to allow us to have a group discussion

The student examples and videos highlighted the fact that the learning strategies are better received and understood by the students when questioned ("can you explain what you mean?") or reexplained by other students.

Quality of presenters- content just enough for the length of the session

Various ways of engagement. Polls, breakouts and math experiences.

The message, it was well presented and well received through multiple mediums I especially liked the "hands on"

Well organized, lots of interactive activities

Very organized, straight to the point. Thanks Juli!

Being able to discuss our common reality and how to work towards equity in Mathematics instruction.

The presenter was very clear in her goals for the session and the material was presented in an easily understood manner.

Learning virtual ways to teach math in an engaging way.

Keeping it interactive, demonstrating different ways we can keep our students engaged online.

The tools, information and resources.

Great host, she put us in a learning situation like the students would be. Shared videos.

The message, it was well presented and well received through multiple mediums I especially liked the “hands on”
Ed's enthusiasm and mastery of his subject and the workings of Zoom.
It was just the right length of time
The delivery of the information was very clear and done in a way that was professional and engaging.
Tools given for online teaching and how to use Zoom to it's best potential.
George always finds a way to reinforce the voice of the participants and create engagement.
Learning some tools for virtual learning.
Great problems to use in class, simple explanations and knowledgeable and competent presenters.
The videos showing how the strategies truly apply in a classroom.
It was a great opportunity to look at the online platform from a learner's perspective.
I was given information regarding how powerful teaching can still be via distance learning.
The video that the presenter shared and paused to model her strategies was authentic and instructional. I also appreciated how she included tips for teaching remotely.
The ability to use technology and being able to share everything that would be in a live seminar over the internet. The leader of the workshop was very interesting and kept it engaging throughout.
How the TQE process can work online as well as in the classroom.
The guest speaker was very clear.
Prof is great at showing by example on connecting and guiding students
I liked that there were videos to show the idea the speaker was explaining.
Teaching us how to incorporate technology into the lesson for distance learning
It provided me with resources and confidence to teach math virtually.
The goals were clear

What would you suggest could be done to improve the learning experience?

More time
Have access to the documents prior to the session
A follow-up session on a subsequent day or sometime during the year, after working with our students for awhile.
Having the slides prior to the meeting so that I could have printed them out and add notes
I would have like to have the handout prior to the workshop so that I could print them out ahead time.
The session was a bit too short.
Would have been nice to get the slides earlier.
I think the session was a little bit too short (1:30). But I also understand it is summer time. I think I would have appreciated at least a 2:00 session. Maybe 2 sessions would be good as well , but not sure you would get more participant getting the fact it is summer.... Is there another book to continue to learn after this session presentation?
Allowing more time for participants to share experiences with the 5 shifts and TQE process in break out rooms
Make session a little longer, it seemed like we had just got started and the session was over.
Have a longer session or have a couple sessions of an 1 hour
Sharing the slides prior to the Zoom meeting so we could have printed them and had them ready for notes.
Do more 90 min webinars for same age group but different content.
Have a longer time or split the session into two times
I feel that Thomasina covered all the bases. She discussed, asked us to reflect, asked us to write our thoughts and answers. I enjoyed the breakout groups as well.
More time
I would love the opportunity to do more learning experiences such as these!
I attended two sessions and both sessions were very similar. I would have liked to have a little differentiation between the sessions.
Thomasenia and Juli's presentation content was almost exactly the same. I would have preferred that Thomasenia focus on 3 content areas and then Juli could choose 3 more and we would have gotten a lot more out of it. We could easily take what we learned in the k-2 and apply it to cycle 2 and vice versa so if feel like I didn't get as much out of this as I could have.
Editor's note: It was clear in the original flyer that the sessions would be similar in structure and concepts presented.

At the end of the session, I have a number of questions, but can't ask, right away or in person anyway. Is there a way we can have a Q & A or is it best to just send the instructors our questions?

I didn't particularly enjoy the breakout rooms. We didn't have a lot of time and it was tricky to get everyone on the same document.

Making it longer :)

As usual, everything was exceptional

I am truly hoping that we will be able to resume and finish our sessions "live" in 2021

Editor's Note: The webinars were offered as an interim measure – it has already been announced that the sessions planned for August 2020 will be offered in August 2021 conditions permitting.

More time. I felt that we could've dug a little deeper into the content if we had more time.

A longer session would have been great as it was a bit rushed at the end.

Because I am not very comfortable using Zoom, I think I should have taken a little Zoom webinar beforehand. When we were put in breakout rooms, I was unable to navigate from one screen to another (from the google doc to the breakout room screen).

More opportunities to discuss directly with peers (such as in breakout rooms)

More time with Juli/Thomasena in breakout groups

I was looking for more specific strategies I could use virtually to reach my K-2 learners. I'm not sure that using the chat would be as useful for that age group

I always liked the clips that were shown in class but since we may be distance teaching I understand why they may not have been relevant

Allow us to have access to the handout ahead of time.

A follow up session.

A longer session with more time to practice using the platform as well as more examples/discussions with the other members.

More of them 😊

On how to introduce a lesson to a particular concept via Zoom or google slides

I would have loved a longer session, it flew by.

Perhaps some questions, polls, or tasks to complete before the webinar to prepare for the discussion.

Longer session. More information

More workshops like this! :)

Nothing, it was very engaging and went by quickly.

Longer sessions

If it could be longer

I suggest we still have our last year in person Aug 2021.

Editor's Note: The webinars were offered as an interim measure – it has already been announced that the sessions planned for August 2020 will be offered in August 2021 conditions permitting.

I feel that it would nice to be able to see more examples how we can make the younger students online learning accessible in the online format.

Sending slides prior to the webinar.

In the memo sent out I am not sure if the length of the sessions were known. I think some of my colleagues did not sigh (sic) up because they thought it would be the same three-day commitment that was expected on site. I think if they knew the session were offered in smaller time slots they would have been more likely to participate.

Editor's note: The length of each session was clearly printed on the information flyer 9:30 – 11:00 and a repeat if necessary, 1:30-3:00

The time went way too fast, especially considering this math Institute normally happens over a number of days I do wish we had more time. Also, with more time, I could have participated in discussions with more teachers than the same group for this session.

Longer sessions

It met my needs and was perfect the way it was.

Was well done and organized.

Longer sessions or more sessions. Or perhaps some recorded mini lessons by the DNA team reinforcing the strategies we use that can be viewed when we want to and can refer back to.

Sending the handout the day before to have more time to print it

This workshop was very well organized and executed. Nothing. Thank you!

The learning experience was beneficial as it was presented. The time flew by and the only thing better would be to have more sessions.

I feel I had two optimum learning experiences, given the circumstances.

I think that by asking the students to come up strategies rather than looking for the right answer, asking them to do the "making sense" of their strategy will make them own their knowledge and learning Math will become more meaningful and enjoyable.

Taking part in two sessions, was not expecting them to be nearly identical.

Editor's note: It was clear in the original flyer that the sessions would be similar in structure and concepts presented.

I thoroughly enjoyed all aspects of it and especially enjoyed the breakout room with the small groups

Have more sessions

Would love a list of apps that can be added for us to use while teaching virtually

A follow up session mid year if we are actually doing this virtually and need additional support

Cheat sheet to HOW to use the tech. How to create what was used.

I'm not sure, I thought it was great!

Ideally more time and questions would have been nice, but I was satisfied with the work that Ed had for us today.

More time in breakout rooms and manipulating resources such as google docs , jam boards, etc..

Another session

More time in breakout rooms and manipulating resources such as google docs , jam boards, etc..

A two hour session. Less people

I do not know. I am very satisfied.

I thought that it was a great length- not too long. No suggestions.

More time in breakout rooms

Nothing, it was great! Suggestion to do this again (virtually) with graduates even if no pandemic as a way to check -in or refresher.

Would have been helpful to receive some information on resources or tools to use regarding teaching math virtually.

More opportunities like this one

Given the circumstances, I think that the virtual session went as great as it could have.

Cheat sheet to HOW to use the tech. How to create what was used.

C'était parfait! ;)

Have longer or multiple sessions.

I found the learning experience fruitful. I wouldn't make any changes.

Increase the duration

Trouble shooting with Zoom: I logged on at 9:00 on both my computer and iPad and then a question prompted which I did not understand, "Dial up by Computer". I was afraid to choose that option because I know several colleagues that have been billed hundreds of dollars because of these meets. By not choosing this option, I did not have use of a camera or microphone. 15 minutes was not enough time to solve my problem.

There's never enough time, so more time or moving on more quickly so we can try other great examples

More sessions please

Nothing it was good the way it was

Nothing! Virtually it is obviously more difficult to garner responses from your audience. I know I would have been more apt to participate and share had I been in the room with my colleagues rather than on Zoom. This was out of your control so I thought it was a very positive learning experience

Provide a list of the best teacher "talk moves" (e.g., that's interesting, instead of that's right)

I would like to know how they choose their questions and perhaps walk us through the process.

A question period or strategy sharing element at the end of the presentation to allow us to demystify how we can practically apply some strategies as we get started (online elements or suggestions preferably)

Focus on the how to do, how to implement

It is always great to break up into teams to discuss things with others - I enjoyed the "Break our groups" but I feel as though there could have been more opportunities to talk with peers.

Telling us what manipulatives may be useful to engage in the tasks so that we could have been prepared in advance in order to choose our strategies in the moment.

Other than it being in person, I cannot think of anything that needed improvement.

Cheat sheet to HOW to use the tech. How to create what was used.

In person (haha). Honestly, it was a great experience online.

Longer sessions.

More situations with different Math problems/concepts.

A question period or strategy sharing element at the end of the presentation to allow us to demystify how we can practically apply some strategies as we get started (online elements or suggestions preferably)

It was great as it was. Longer would have been better -- the only way to improve it!

Have the PowerPoint available the night before the workshop

I thought it all went well.

Maybe a few different webinars would be nice!

A longer class (3hrs)

Make a distinction between the question asked - solve this question - with the purpose of the question - what are the many ways to solve this question or to make sense of it.

More sessions

Longer session and more of them

The Cohort 6 presentation had a play-by-play explanation of one of her videos by Juli Dixon. I felt that was really useful. More of those would be helpful.

Perhaps a few more virtual sessions and not just one?

longer session

I think Thomasenia was very well versed in on line learning. I would have been happy to attend more sessions.

Our group was quiet, much more so than if we had met face-to-face, I'm sure (I know that I held back a little myself...). However, it takes time to build trust within a group of participants. Perhaps, had this been a series of webinars, the result would've been more effective but, obviously, we're all hoping to be together next summer instead of meeting virtually so that would be a moot point.

Perhaps more time, for the different topics covered. I found the webinar very interesting and it would've been nice to have more time to explore the topic.

More time especially for small group discussions (breakout rooms).

providing more tools to use in the classroom

It was the best that can be done virtually but my concern and focus has changed with the new covid classroom approaching. It is not the same experience online but was very well organized and engaging.

Maybe go a little slower.

There was a lot of information to cover. A longer workshop with more breakout sessions would be helpful.

More tasks to try

multiple training sessions

Maybe a bit more "lecture" from the expert ;)

How would you rate the presenter’s facilitation of your breakout session? (1-Excellent, 5-Poor)

	1	2	3	4	5
Thomasenia Adams a.m. session	75.7%	13.6%	2.6%	8.1%	-
Thomasenia Adams p.m. session	69.7%	15.3%	3.0%	6.0%	6.0%
Juli Dixon a.m. session	64.9%	10.8%	2.7%	13.5%	8.1%
Juli Dixon a.m. session	83.0%	7.3%	-	7.3%	2.4%
Ed Nolan a.m. session	82.3%	5.9%	-	5.9%	5.9%
Ed Nolan a.m. session	75.8%	9.2%	3.0%	6.0%	6.0%
George Roy	71.9%	9.4%	3.0%	6.3%	9.4%
Juli Dixon Friday a.m. Cohort 6	53.1%	18.7%	6.3%	9.4%	12.5%

What feedback could we give the presenter in your breakout room to improve your experience in the future?

I would have liked to get the notes/pp overview before the session.
None it was great
None she did a great job.
all good!
Was confusing to send link before breakout room because once we were in the room we did not have access to it
It would have been nice to have the questions given for us to try to be in the presentation notes
Sometimes the document camera covered up the slides, making it difficult to complete the math task assigned.
I liked the sub groups for discussion.

As someone who had never experienced breakout groups, I would have liked an explanation as to how they worked.

I found the information for the breakout sessions very clear.

more time to discuss and record :)

Again, if it's possible, how can we facilitate questions and answers in this context?

I particularly liked how Juli explained the technology she was using and how she had set herself up before she began her presentation. I would have liked Thomasenia do have done the same.

Juli Too short

Give more time to complete the activity

Juli is fantastic!

The session was excellent! I appreciated the use of the document camera as well to see the examples. It would have been nice to have the handouts prior to the session to know what notes I needed to take.

Maybe a little more guidance as to how to go back and forth between the google doc and the breakout room view before letting us go into the groups. I also could not seem to access the google doc in Juli's presentation by clicking on my group number. I got access when someone in my group began writing in it to record our answers and she shared her screen with me.

Give more time to complete the activity

Their management of technology, willingness to share teaching approaches with it were very helpful

Thomasena could explain what the Google doc will look like/access to doc more before sending us to breakout room.

Thomasenia: I would have appreciated more strategies for how to engage the early years in the online math lesson.

Juli: Looking forward, I would appreciate some ideas about how to gather evidence of learning from students when I need to be able to associate a name to the work.

A little more time was needed

Perhaps have another break out room for another task

It was very helpful and made clear oh how to do the TQE in a distance learning format. I still wonder though about how to incorporate manipulatives in this format, are online ones useful, or each child should have their own set of real ones?

How to introduce a new concept virtually

I had never used a breakout room, so I didn't know how to get in! Also, I was on an iPad, so switching screens from the document to the zoom screen was a little less smooth than I expected.

give more examples of rich math questions

Nothing, it was great and went smoothly. Our group was great too.

Nothing

Though I loved the breakout session, I found it difficult answering the questions in the first activity as I (and my teammates) were distracted by the other teams typing as it was a shared Google doc. I am not sure if there is a way that our answers could be combined at the end of the breakout session.

Being able to access the questions for the breakout room in advance.

Thomasenia Adams - Monday morning: I found my presenter was really following the strategies of teaching by listening to the students, repeating the student's thoughts and scaffolding further thinking. Juli Dixon - Tuesday afternoon: The presenter in the breakout room was very responsive to our teams thinking. I feel she could have encouraged different people to speak and/or use different teaching practices instead of using the first answer received.

I attended Juli and Ed, and they both had the same breakout activity. It would have been nice to have something different.

Increase the length of time for the session which will allow for more time to learn not just from the presenter but from one another. It was such a short but great experience!

Given time constraints everything was great.

Ed didn't come into our breakout room, but we were also limited for time.

Both presenters did well. Though similar in content, the ability to allow us to engage allowed us to have diverse results and experiences to learn from.

Sessions were so short so I can't really complain about the breakout sessions... but if we had more time those breakout sessions could have been better with either the presenter or some facilitator popping in to discuss with us.

The sessions were very similar. The overlap should have been communicated to us beforehand. I felt somewhat like I attended the same session twice.

Editor's note: It was clear in the original flyer that the sessions would be similar in structure and concepts presented.

Thank you for showing vulnerability in terms of teaching on-line. Juli, your session was flawless but you continually mentioned how you were trying new strategies on-line. I think it is exactly what we needed to hear.

Both Julie and Ed provided wonderful tips on using tools like splitting your shared screen with a document camera. LBPSB is a Google Apps based school board, so it would have been cool to have learned how to maximize those tools as opposed to Microsoft Office tools.

Please note that this is nit-picking because both Ed and Julie showed us how to engage in student discourse with a shared Google Doc. Everything else that was shared was really useful for me!

I loved the way Ed interacted with us and I thank him for the strategies shown. Everything was very clear and adaptable to all levels.

I felt rushed during the timed question regarding which statements showing equality(or not).
Other than that the learning experience was very rich.

Both presenters were clear about what we needed to do. Maybe a bit more time.
Ed was great
How to make the tech stuff.
More time in discussions
It went very well. We were able to accomplish expectations
It helped to have someone in the room who had done it the day before. They knew how it was set up. Not a major issue but it did make it easier.
More time in discussions
Juli was great- as always. Very clear. Smooth presentation.
How to introduce a new concept virtually
Explain how the breakout room will work before giving the math problem. My brain was already thinking about the problem and not as much listening to the breakout room instructions (where to find our group, where to find the shared Google Doc) - to both presenters.
I loved that George popped into the breakout room to check-in.
I appreciated the comment George made that he is learning with us. Making participants feel comfortable allows for a safe learning environment and makes participants more willing to share.
I thought the presenter, George, was a great facilitator because he was focused on the material presented so we could get through it without rushing the discussions.
Suggest participants have pen/paper handy at start.
The whole breakout room was confusing to me (first time) because of all the tabs and documents that we had to open and share. I would have to get familiar with this before actually using a breakout room.
Ed & George - They didn't have much of an opportunity to stay since we were low on time. Both asked us our interpretation of the situations and asked us to share our strategies but very briefly since there were many groups.
More time
It was fine
I like the idea of the breakout room, but it would have been good to have a "facilitator" in each group in order to kind of break the ice and get people talking. Ours was very quiet and not much was said until the time had almost expired. Also, the question we were asked to discuss was a higher level (Cycle 3 ?) question and most of the teachers in my groups were cycle 1 and 2 so it was hard for us to wrap our heads around the question and then offer solutions when we aren't typically used to dealing with fractions of that nature! 😊
The time was a bit long, however our group had no technical issues etc

More opportunities for breakout rooms.

I really liked the way George explained how the strategies and tools he gave us could be useful in in person teaching or online. Given our reality, this was really appreciated.

We did not have a presenter in our breakout room, we were rather quiet during it so there was not a lot sharing of ideas. Perhaps to encourage us to be more open and to take risks when participating with our peers.

More back and forth

Come see if we have questions.

Instructions were clear. There were no problems going from the main platform to the breakout session and vice versa.

The breakout room was fun!

I like the timer when the last minute was on. Helpful for our work timing.

He did the best he can with this limited amount of time

No feedback - very good

Thomasenia is a wonderful speaker and draws in the audience. I always enjoy her sessions.

The time allotted was excellent because it forced us to get straight to work. However, being that no one knew each other, it would've been to have a few extra minutes to see who I was actually speaking to/working with.

More time

provide more time to complete the task

Neither one joined my breakout room but Ed explained how to get there a little bit better

Allow more time in the breakout room to share in small groups

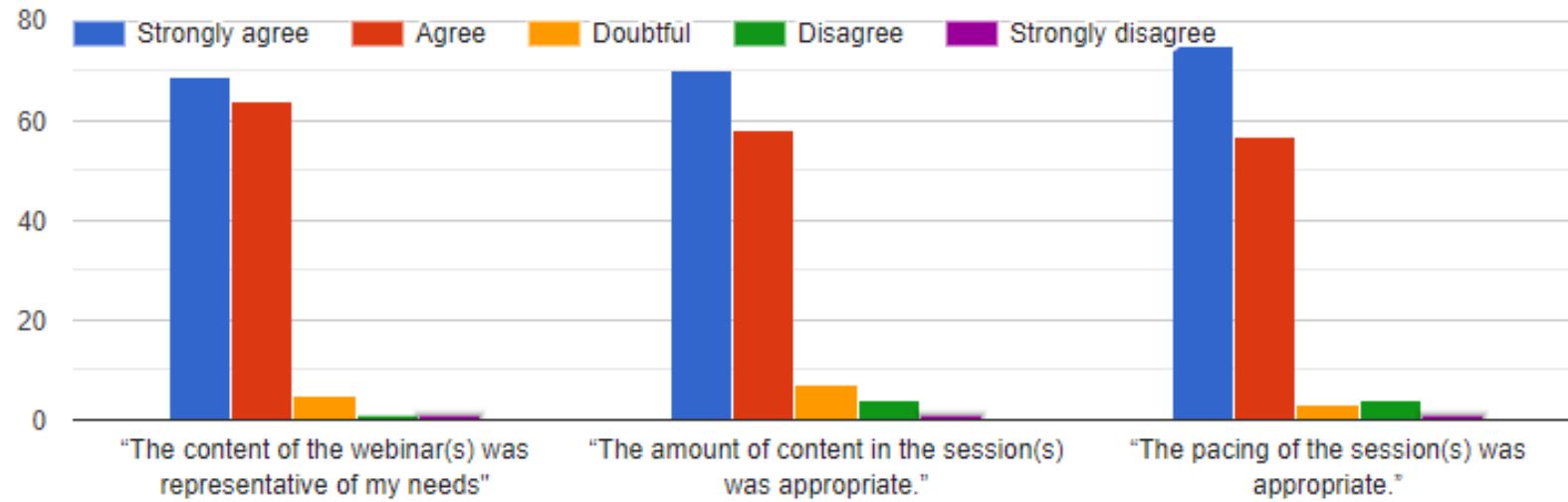
I thought it was good.

She was clear in the directions but did not attend our breakout room.

It seems that the presentations were not meant to be attended multiple times (too much similarities, almost identical, the second time, I felt like I was wasting my time). Super interesting, but it could be more different from one cycle to another.

Editor's note: It was clear in the original flyer that the sessions would be similar in structure and concepts presented.

Please indicate to what extent you agree or disagree with the following three statements:



What support mechanisms do you feel your school board could provide to help you continue to grow professionally after this PD experience?

More sessions for distance learning with our consultants.
More release time throughout the school year to meet and plan with fellow attendees
Meet a few times a year for work sessions. Visits by consultant to the school for work/brainstorm/teaching sessions with cycles to expand this approach to teaching Math. Sharing of resources & good Math tasks & talks
More resources on how to implement the math program digitally
I would like to have some more PD to help me prepare for remote learning for 6 year olds.
More PD throughout the school year.
Smaller groups
Continue the sessions we've been doing with Jeff
I was participating in the Math Network project and it was very interesting but unfortunately with the covid-19 we couldn't meet more. What will happen for this project to be able to be continued????
Continue follow-up meetings with Cohorts
More material
Continual formation, sharing ideas
Organize opportunities to collaborate with others who have taken the DNA mathematics.
Continue to help provide us with high level teaching questions
Providing us with time to meet with the Math consultants to develop rich math tasks relevant to the curriculum.
Have time to plan specific lessons using TQE approach to use in class.
Time to speak/meet together
Continuous PD for the teachers.
More information on useful Zoom/Google tools, such as polls.

I loved that last year we had a follow-up session in our school board with our math consultant. I would love to do that again this year. I have been very active in asking assistance from our wonderful math consultant who has come into class with me for different situations, such as helping me present a math application or situational problem to my class

more workshops

We had a follow-up session during the last school year with our Math consultant on facilitating discussions which was really useful. Other such sessions that flesh out what we're learning with the DNA team would be helpful. Also, how to design or find the rich math activities for use with students.

I hope that the conference continues to reach out to graduates.

More sessions

More of Juli's sessions

To continue offering sessions to perfect my skills and give the opportunity to share experiences with colleagues.

Math consultants should share this knowledge with school teams specifically with regards to online learning

ETSB had a math network for MSI participants set up prior to COVID closures. I would love to see these sessions continue virtually next year. I look forward to the math book club that they have organized.

Zoom and google doc webinars? Our board is using Teams...so I will need some more training on Teams. I have already taken a couple of webinars that were offered back in June but I feel I might need refreshers and then go deeper, also.

Continued webinars on remote teaching, by grade band

Practise using the various programs (Zoom, screen sharing, whiteboard, etc).
Access to Zoom polls.

I need to think more about that. We are hopeful that the virtual book study will be helpful, as well as some online webinars that will focus on Multiplication strategies for Cycle 2

More knowledge of how to use zoom of google hangouts to better meet the needs of my students through distance learning

I loved the idea of remaining in contact with the graduates.

More workshops on how to use the tools to enhance online learning.

More training on how to engage the students virtually. What online tools are out there and how do we use them to their fullest potential

Support and help for distance learning and the tools they are expecting us to use

More access to technology in order to be able to use two screens

Regular In-class support for implementation, removal of standardized testing which forces teachers to rush through concepts to cover them all for mid year testing.

Access to the same zoom tools that the presenters used, from Zoom Pro to equipment that facilitates online teaching, and the training to use them.

Workshops to explain how to use the tools that we learned about today

Offer more opportunities to work with other teachers

I think our school board Math consultants actively promote the strategies learned from the DNA team to our teachers.

Virtual support

Math manipulatives, time to plan and collaborate with colleagues

Time to develop ideas and methods.

To have more PD covering all of what we missed in our third year, unless we are invited back next summer.

Editor's Note: The webinars were offered as an interim measure – it has already been announced that the sessions planned for August 2020 will be offered in August 2021 conditions permitting.

More professional development on how to make virtual learning accessible to all age groups.

Opportunities to work together in the design process to create tasks that are appropriate for in class or virtual learning.

Opportunities to build math lessons with others.

Training on how to use all the tools in google meets, or zoom OR better yet, access to zoom pro for all teachers.

Upgrade our zoom account

Continued support and meetings for participants. Filmed sessions of our boards teachers using the strategies learned that can be shared and accessed for all teachers. Links to the videos presenters have shown to really see what types of conversations and dialogues are best to provide authentic learning.

As a consultant, I would like my Board to shrink my territory or grade band so I can spend more time working with fewer teachers. This focus will allow me to have a larger impact.

More manipulatives

Allow the Poll setting on Zoom to be available to teachers.

Follow up sessions.

Small group meetings to discuss and plan together

As a resource teacher, time with the classroom teacher is always needed to properly plan lessons/units, to anticipate errors during tasks and discuss expected outcomes.

Opportunities for the graduates to have ongoing support, maintain momentum for the DNA philosophy and gain new ideas for engaging mathematical lessons.
Meetings (virtual or face to face) to touch base with other participants. My school board does plan these for participants, and I hope we will be able to continue in the coming year.
It would be great if school boards could provide full access to different apps that will facilitate the online learning.
I would enjoy more distance learning training and provided with tools that can be readily available to bring to the distance classroom
Several PD sessions per year
Online teaching
Need to offer document cameras and free apps. if they support virtual teaching
Continued development of tasks, time to share with other teachers in this process
How to use tech
I would really like to continue to have time allotted to work and plan with my fellow colleagues.
The school board could organize more PD with cohort 1 to share what has worked in our classes and what we could improve on in the future.
Follow up meeting with our consultant
Time to meet with other colleagues online.
Some 'connection' during the year to refresh our use of the material and share best practices.
Further, occasional small group follow up meetings
Try to integrate my colleague into that philosophy.
Follow up sessions or a forum to collaborate & communicate
Even a short seminar like this could be helpful for those who were not able to attend the entire conference. As a member of Cohort 1, it was great to get a refresher. More of these from time to time would be great.
More access to technology in order to be able to use two screens
Time with colleagues (and fellow participants) of same grade to create meaningful tasks
More opportunities to collaborate with colleagues at other schools.
Continued follow-up and support for.SI participants to help them share with school teams

Ongoing workshops throughout the year to help connect these teaching methods we are learning about, and how they can be adapted to help support students in situational problem solving, which continues to be a challenge for students

Similar sessions for math teachers

At our school, we work great as a team and many of us have received a lot of PD. However, we sometimes find it difficult to put all of this PD in action at the right time. So we could use support and time to organize the information we have received to adequately transfer it to our students.

Follow up sessions to allow further discussion amongst teachers within the school board.

I would like to have researched based books and articles on mathematics. As well, I would like to have a mathematics PLC (Professional Learning Committee) based on cycle teams that could meet and plan lessons and have discussions about teaching experiences.

Short online check-ins through out the year.

Teaching math to students with learning disabilities. I have many students who cannot do mental math in grade 10.

A license for the full version of Zoom (breakout rooms included), training with online resources such as Desmos and Geogebra that would help students use various representations and strategies even online, more document cameras, more practice with the TQE process (maybe including a bank of meaningful tasks shared by teachers)

More collaboration/sharing between schools.
Receive rich tasks for each level

The example videos were great, seeing more of those would probably be helpful

I was lucky to be part of a PD math group last year where we able to discuss the TQE process and start to develop packages for our colleagues. Unfortunately, due to Covid, this got cut short so I hope we will be able to pick it up again. I hope that all math teachers will be encouraged to sign up to do this type of PD in the future as the merits are huge.

More in-school teacher coaching / mentoring with more experienced teachers

Mentor program

A specific high school PD, or a vertical PD with all high school level coordinators to ideally create a consistent structure throughout the levels

I think schools need to provide teachers additional support and training on using virtual platforms and class management in a virtual setting.

Regularly scheduled cycle meetings or "check ins" with teachers alike, to continue the conversation on growth mindset in mathematics and to continue to develop and discuss strategies that can be implemented in the every day classroom.

Time to collaborate on creating tasks, learning and trying tools in both in person and online environments.

Continued instruction in the Math Institute.

Continued access to the DNA PD sessions during the summer.

More PD conferences

Scheduled support sessions

Easy to access Math teaching help.

A bank of examples of problems students can work on. It takes so much time and energy to always create new material

More webinars would be fun!

Have sessions offered to the staff for online teaching and practice to improve our skills in relation to math.

Unfortunately, it always comes down to money for substitution. I hope more EMF will be available this year.

A bank of lesson ideas by strand

A platform to exchange best practices

More opportunities to share and learn new strategies, and better resources (tasks and materials).

Support with technology (document cameras, virtual manipulatives)

I could certainly benefit from a more reliable smart board . But just a webcam would be very helpful. (Unfortunately, there are limited supplies).

Follow up on the strategies to get talk moving with students (re-voicing, adding on, etc.).

Proving aid with using the resources in the classroom in order to ensure that the students are capable of gaining an understanding of the information covered in class.

more manipulative in the classroom

Perhaps check ins to reflect on how to create that proper climate of distance learning should happen.

Having more opportunities for PD sessions.

More materials to research ideas for rich math lessons

More virtual teaching tools and opportunity to practice them in a safe and engaged setting.

Share example of lesson plans on a specific subject. A template to follow.

PD days for Math

time to work and discuss with colleagues on how to implement in our classrooms

Continue to meet between people that had the DNA math workshops to share ideas.

What content should be the focus of future PD (i.e. what content area or curricular goal(s) do you feel least prepared to teach conceptually?)

Generally in terms of assessing mathematical skills acquired by individual students, when teaching virtually.
Fractions, time, helping students solve situational problems (even application problems)
Evaluation in the digital age
Problem solving
Sequences and drawings
Situational problems
I need to work on finding cognitive demanding tasks to better have the students to go further in their learnings.
Probability & Statistics
Grade 1 information
Different activity that we should present to the students
More resources for place value.
Choosing/identifying good quality tasks for my students
Continue to provide questions for each area of content that leads to high level learning
How to lead rich discussions and ask relevant (provoking) questions with young learners in your class.
Time to prep. I feel ready to teach conceptually but need time to prepare lessons.
Statistics
How to encourage the students to discuss their thinking in a second language.
Generally in terms of assessing mathematical skills acquired by individual students, when teaching virtually.
Fractions, in particular if we are teaching online perhaps?

Multiplication and Division, different ways of presenting them, decimals

problem solving

Fractions (I've only done one year of MSI so this may come up later.)

More tools to use for online teaching related to Math Concepts

How to use on-Line teaching methods to implement math

Problem solving strategies (need more support)

Fractions & geometry through distance learning

Situational problems and designing tasks

2-D Geometry is always a tough unit for the students, especially our French students who are learning English. There is so much new vocabulary and concepts introduced and they become easily mixed up.

Assessment in online teaching (if necessary).

While I appreciate the 'evidence' aspect of the TQE - more support around assessment and the "now what" would be helpful!

I would love for something similar in Language Arts

Regrouping

How to engage students more on online learning

Creating and testing out rich and meaningful tasks that involve an effective use of numbers to pull out the possible misconceptions that students have on various concepts.

Word problems: creating rigorous and appropriate challenging word problems

I would like to have more hands-on activities for place value and fractions in cycle 2.

Probability, statistics, more fractions (I never feel prepared enough for fractions!)

Anything that involves math manipulatives! I was so pleased at how much I integrated student discussion, learning centres, and using manipulatives into my teaching after last year's SMI, I feel lost going into this year without all of my face to face tools.

Measurement

Creating deep, thought provoking math questions

Fractions and problem solving

With regards to the K math program/goals, I feel good but there is always room for improvement!

Team work breaking down the math curriculum to make sure each grade meets the expectations and not having learning gaps in each grade.

How to make center/manipulative learning accessible in a virtual atmosphere?

I would love to see how the presenters would tackle a situation problem, even if it's not for evaluation purposes. I'd just love to see how they would approach one of those required components of our program.

Multiplication and division - making students create the context.

Strategies for helping student look for patterns.

I am always searching for ways to represent statistics and measurement in new and fresh ways that's hands on.

I would like to focus on questioning.

Fractions, Decimals

Geometry on-line I find to be quite difficult.

Review of covered materials from past years... I feel that repeated opportunities to review will allow more people to get fully on board and have them feeling prepared to use this approach.

Building decimal number sense and understanding of percentages.

I am sorry. I do not know what I do not know! I am not sure what I need next.

statistics/probability

Decimals

geometry and measurement as we have not done that yet and I am still uncertain how to go about bringing that to the students without the guidance usually used

Eliciting student thinking

Online teaching

decimals, fractions for gr. 5-7, number sense for k-2

Long division of decimals, order of operations

Using manipulative s virtually

I would like more focus on decimals.

I always need to work on fractions and different ways to introduce the concept with the TQE process.

Place value hence number sense

Creating appropriate tasks.

Given the circumstances, more distance learning contexts

Prime number, fraction, division, mean

Trauma Informed

Situational word problems- as always! Best ways to support students through the length of them.

I would like to have more hands-on activities for place value and fractions in cycle 2.

Continue fractions! Very difficult concept

Support creating rich tasks

Anything is always helpful

Evaluation, problem solving, statistics and fractions are particularly difficult for students and finding new ways to teach such topics can be challenging

The 5 shifts in the secondary classroom, the TQE process and how to elicit student thinking.

Evaluation and competency development. In school and remotely.

My sessions have revolved around proportions and algebra (the main two concepts covered in my grade level) but I'd like to see more on geometry (prisms, pyramids, cylinders).

Using manipulatives virtually

probabilité

Algebra

The content area that I would like a focus on is Probability.

Spiralling

All the higher math concepts: factoring, radicals, radical and rational equations, etc.

More number sense and conceptual approaches instead of the procedural approach to algebra, then showing how they're connected

Exponent laws, parabolas

Analytical geometry

Asking the right types of questions so the students are always put back in the drivers seat and are allowed to explore and learn from each other.

More fractions/decimals and relation between them

Statistics

Algebra

I'm not worried about the content, just the platform.

Designing rich math activities for potential online learning situations

I would like more tasks and PD for teaching conceptually at upper high school. (Basically anything but functions as the DNA book has quite a bit on that topic).

Using manipulatives virtually

Math games, kinesthetic connection resources.

Situational problems

Algebra

I am comfortable with all the math concepts we need to cover.

Algebra

It's all new so I would need more time to reflect on it.

Reading would be tricky to virtually teach.

Fractions, differentiation online

Even though this may not be what you are looking for as an answer, I believe it would be necessary to show the relationship and how to move from conceptual to procedural notions, especially at the high school level. In doing so it may bring comfort to teachers who are having difficulty navigating the transition from procedural to conceptual teaching.

Fraction decimals percentage

Functions

Secondary - Functions. Cycle 2-3 - More fractions decimals percents and Cycle 1- even more arithmetic operations, I know we have plenty of exposure here, but it still helps to have more.

Fractions for grade 2

Continual support with virtual manipulatives

In my planning I need to work on giving my students time to think for themselves and being prepared with the right questions to deepen their thoughts about the learning situation.

Developing meaningful math centres for my students that capture the content in each lesson.

Tools and resources (good tasks) that can be used to teach conceptually both online and in class.

problem solving

I'm interested in learning about how to effectively teach the specific math concepts. Having a greater understanding of the curriculum and how to get it across to students.

Hands on rich math lesson ideas

More examples of high-quality tasks that can be taught virtually or with the use of technology.

curriculum based hands-on activities to use in the classroom

converting units of measurement

situational problems : how to help kids to break down a task without giving too many clues.

From the list of teaching practices below, which three would be your top priority for professional development?

Representing student thinking and key ideas

Orienting students to each other's ideas

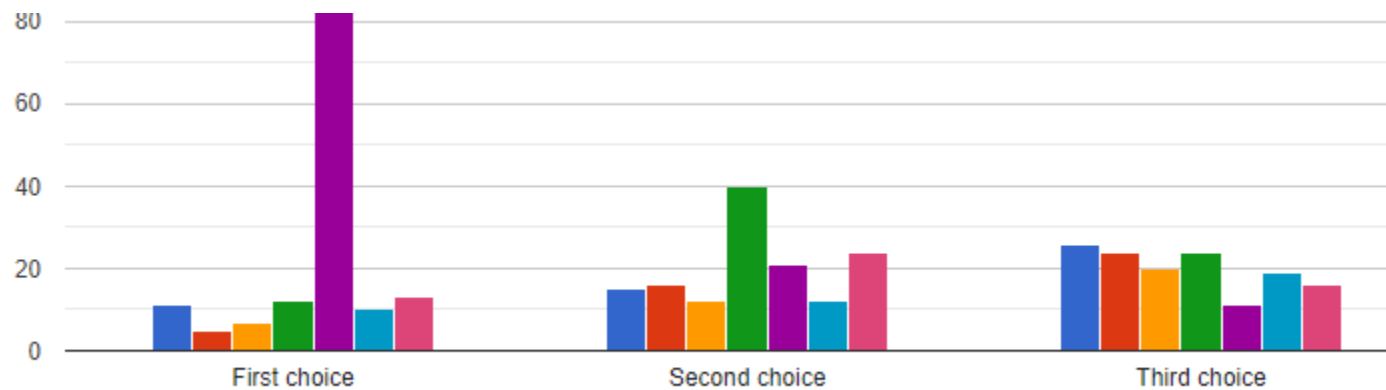
Recognizing students as competent contributors towards developing understanding

Eliciting and responding to student thinking

Designing and facilitating rich math activities that allow for student sense-making

Establishing and maintaining expectations for student participation

Identifying and teaching towards an instructional goal



Is there any other feedback or recommendations that you wish to provide the organizing committee?

No (X 14)

I'm not sure what the plans are for next year but I'm hoping that this won't replace my final year.

Editor's Note: The webinars were offered as an interim measure – it has already been announced that the sessions planned for August 2020 will be offered in August 2021 conditions permitting.

Thank you for including DNA graduates this year.

I would like to be able to "sometimes" work more on my grade level teaching (grade 1).

Thank you for including the graduates in these virtual sessions and finding ways to help us continue to grow in this process.

Virtual option was great alternative to allow us to continue learning about this approach. Looking forward to next year, fingers crossed in person.

I appreciate that you offered this Pd opportunity. It was a good reminder of the TQE process.

Great initiative since we couldn't meet face to face. Thank you!

Thank you so much for organizing these sessions for us!

Thank you so much for all your effort and work to keep us connected to what we are learning through the MSI. In person would have been great, but this was also very good. You could have easily said that everything is cancelled for this year or that we lost a year, but you have gone above and beyond and I appreciate that.

Thank you for this opportunity!!

I look to more of such experiences

Please provide us with more sessions if possible, they are extremely helpful.

Thank you so much for organizing and offering this unexpected opportunity. I feel privileged to be a part of it.

I appreciate these opportunities to learn more about the TQE process. Thank you!

Tthe pd opportunity was appreciated

Thank you, as always, for creating such an amazing learning environment for teachers. Very much appreciated!

Thank you for all the effort that went into this Virtual conference with the DNA team!

I'm so glad graduates were included!

You did a fantastic job responding to our needs and developing a workshop to address distance learning during these difficult times

Thank you for all that you do!

Thank you for organizing these sessions, it is wonderful to hear from the DNA team!

Thank you

All was great

Thank you for doing the webinars!

I would just like to take this opportunity to say thank you for organizing this on-line session. Much appreciated during this pandemic! I enjoyed seeing familiar faces from the past 2 years.

I wish cohort 4 can finish their last year in 2021, as one session online was not enough!

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I like the option how you allowed past graduates the option to hear the PD and continue to expand their thinking and learning about mathematics!

Thank you for organizing these webinars!

Can any sessions be offered during the year? I think I could get my whole team to participate if it was not in the summer.

It was all well done, well prepared. I would have loved to have access to the handouts prior to the sessions. I was lucky and was able to print them as soon as the link was sent, but not sure if everyone has that same luxury.

I'm really fortunate to be part of this. I'll be sad when it's over.

No, was well presented given the circumstances. Hope to be back in person next year!

Thanks for this. It was disappointing to not be able to meet this summer, but this was a nice event to feel like there is some continuity that can be carried towards next year's session.

Thanks for putting this together. Got me back into thinking about teaching and learning.

Thank you. Job well done in difficult times!

Just a heartfelt thank you for all the organization and advocating for teachers and the need for this PD. My teaching has grown so much as a result, thus helping hundreds of students gain a better mathematical mindset and development.

Many thanks for another enriching experience!

Thank you so much for organizing this PD. The information that we get to share is amazing!

The opportunity to meet with teachers and consultants has improved my teaching. I would like this to continue
I want to express my gratitude for all the work that you have done and everything that has been provided to me by attending these seminars
I really enjoyed the 2 virtual sessions. Keep up the great work!
I would appreciate the opportunity to attend more sessions like today in the future.
The focus on distance learning today was not particularly useful.
There should be some focus on assessment and evaluation
Thank you so much for this valuable training opportunity!
It was a great opportunity. Thanks.
Thank you for all that you do!
No, great organization as usual. Very grateful for all that you all do for us teachers. Thank you!
I filled out the survey for Ed Nolan
I wanted to give George feedback as well. Perhaps the forms should have been sent after all the sessions were over?
I appreciate all the thought and effort that goes into these sessions. Thank you all.
Thank you for your time!
I am recommending that graduates should be invited to virtual workshops to refresh their skills.
Thank you so much for organizing! It's been lovely to get together even if we're not in the same physical space.
Higher math content; grade 10 and 11.
Thank you for organizing these webinars for those of us who were really looking forward to sharing and learning with one another this summer. It was nice for some of us to have had the opportunity to attend more than one session. There's never enough time, in person or online, which I'm sure is also due to contractual agreements and the cost of hosting DNA Math. Since a lot of time was spent "catching up" (colleagues and presenters), should this be online again in the future perhaps we could start a bit earlier and reacquaint ourselves before the presenter arrives and begins. Thank you for providing us the link to the folders with the slides, Google Doc and chat transcript.
I would enjoy another session in the fall perhaps At least one more before next summer.
I enjoyed the presentation. Thank you!
Is it possible to break the sessions into two? It's the virtual format I struggle with, more sessions but shorter in length might be more impactful

1-I would appreciate if as a consultant, I was in cc for emails to teachers in my board. There was an issue this year where two teachers are adamant that they did not receive communications that were sent and I have no trace of it so it puts me in a difficult position for my relationship with these teachers. I understand that this is an extra step and it may not be possible, but it would be appreciated.

2-I really like the idea of online sessions for graduates as a way of continually supporting the cohorts who have completed the three years. Maybe more of a working session with DNA support. Teachers could submit topic ideas where they need support and the rest of the graduates, consultants, and DNA team could bring ideas and we could have "break out room" support to develop tasks and eliciting questions that could be shared out.....Just a thought...

Perhaps more online training if in person is not possible.

Great work! I was happy to be able to return to the DNA sessions this year after thinking it was over for me last year!

Is it possible to break the sessions into two? It's the virtual format I struggle with, more sessions but shorter in length might be more impactful

Great work with us teachers. Thanks!

Just a sincere thank you for a very interesting and enjoyable session. I certainly learned a great deal and I plan to implement the strategies that I observed. I really liked the video segments and they way that Juli address the students with words like "that's interesting", "what do you mean by....", etc.

I wish I had known about the other math webinars, I only knew about the Friday one.

Editor's Note: The sessions on Monday through Thursday were designed for those already part of the process (Graduates and those who has attended previous summers). The Friday session was designed for those who are about to embark on the process in August 2021.

We should have more of these short online classes where we go into one topic and then we go implement it and come back into another short class and implement it. I think it would be more efficient than a week's class during the summer where you cannot implement things right away as you learn it and it's fresh in your memory.

I wish there is a platform where teachers can upload their activities and share best practices related to the DNA approach.

Thank you for the wonderful experience.

Nothing except a huge thank you!

Thank you for the interesting and informative workshop.

Thank you for organizing the workshops. It was truly a worthwhile opportunity to get a refresher on the TQE process and touch base with colleagues.

allowing time to create and rework content to use in our classrooms.

Tell the presenters that many people will attend several sessions so they can be more different from one another

Editor's note: It was clear in the original flyer that the sessions would be similar in structure and concepts presented.