# De-streamed Grade 9 Mathematics For September 2021

# Agenda

# **De-streaming Objectives & Framework: Ministry Information**

Gina Iuliano Marrello, Superintendent of Student Success & Alternative Education

## **Anti-Racism and Equity:**

Derek Chen, Superintendent of Equity, Diversity, Indigenous Ed, and Community Relations

# Description of the New Grade 9 Mathematics Curriculum and Educator Professional Learning

Gina Iuliano Marrello, Superintendent of Student Success & Alternative Education

# Ministry De-streaming Objectives

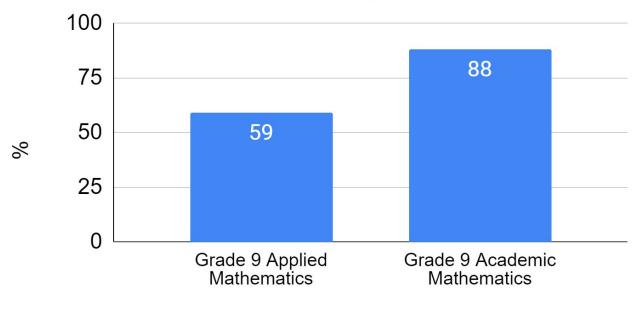
- 1. Phase out streamed courses
- 2. Dismantle systemic discrimination
- 3. Remove barriers to post-secondary pathways

## What is "streaming" and why is Ontario ending streaming in Grade 9?

- A different pedagogical approach
- Applied seen as less academically rigorous
- The marginalized streamed into applied
- Limiting access to post-secondary pathways

Research shows that streaming in early secondary school has negative long-term impacts on 'lower' streams.

#### **Transition Rates to Post-Secondary**



Course taken in Grade 9

#### What We Know: Key Facts

#### \*Enrollment in Grade 9 Applied Math:

36,811 students (23%) were enrolled in 2018-19

18% of students living in lowincome neighbourhoods<sup>1</sup> Enrolment by board ranged from 14% to 51% taking Applied

15,997 students with special education needs (3.4X more likely to enrol in Applied)

1,728 self-identified Indigenous students (2.2X more likely to enrol in Applied)

\*\*Negative outcomes associated with enrolment in Applied courses

- feel they do not belong at school
- 4.4X more likely to not graduate<sup>2</sup>
- 59% pursue PSE, vs. 88% in Academic courses

\*\*\*Impact on Black Students

- Toronto DSB data shows 39% of Black students are enrolled in Applied courses vs. 18% of non-Black students.
- The Review of Peel DSB found that Black, Indigenous, and Latin American students are overrepresented in Applied and LDCC courses, including when they request to be placed in Academic courses.



# De-streaming Strategic Framework

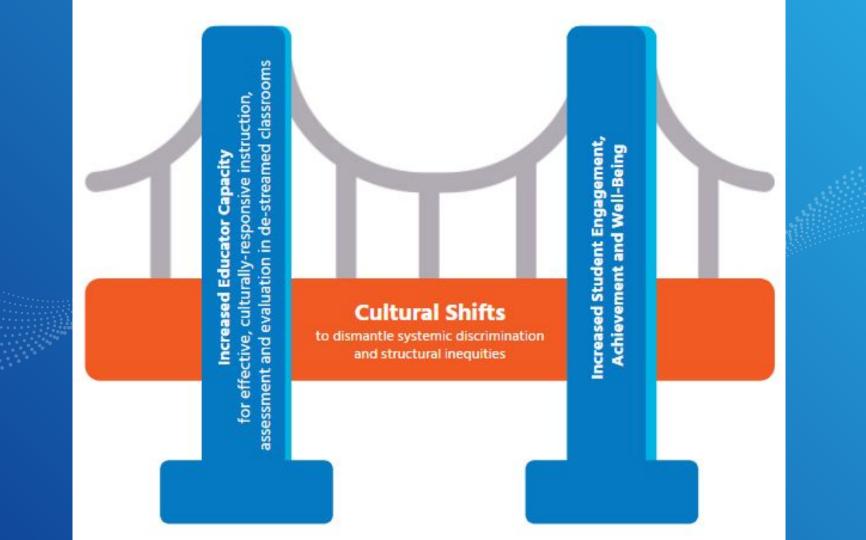
## **Goals of De-streaming**

**Cultural Shift** 

to identify and dismantle systemic discrimination and structural inequities

Increase Educator Capacity

for effective culturally-responsive instruction, assessment, and evaluation in de-streamed, multi-level classrooms Increased Student Engagement, Achievement, and Well-Being



# Anti-Racism and Equity

Why is there such a disproportionality in streaming?

## **VOCABULARY**

# THE PSYCHOLOGY OF CRUELTY

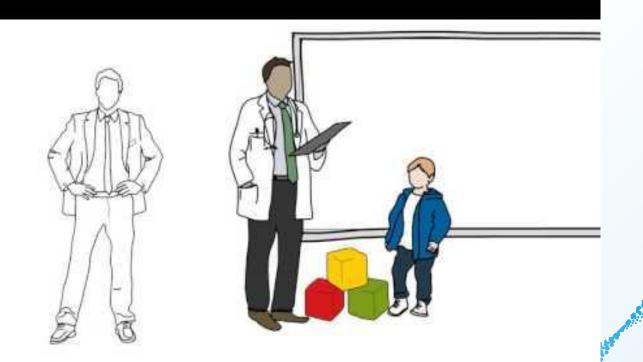


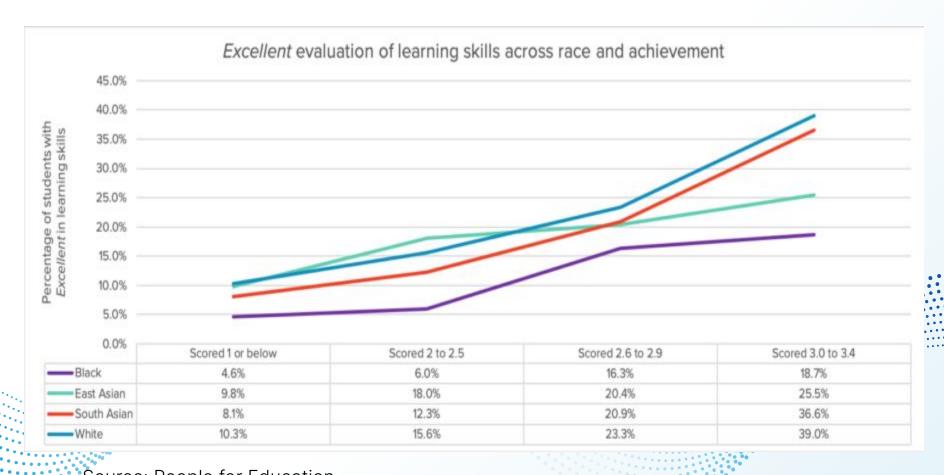
SOMEHOW MADE IT EVENTUALLY OKAY



## **Implicit Bias**

Thoughts and feelings are "implicit" if we are unaware of them or mistaken about their nature. We have a bias when, rather than being neutral, we have a preference for (or aversion to) a person or group of people. Thus, we use the term "implicit bias" to describe when we have attitudes towards people or associate stereotypes with them without our conscious knowledge.





Source: People for Education https://peopleforeducation.ca/our-work/new-study-finds-relationship-between-studen ts-demographics-and-their-learning-skills-marks-on-report-cards/

### **Studies**

 Learning Skills Study (People for Education)

De-streaming in the TDSB:
 Creating a level playing field?
 (Patricia Fogliato)

# **Description of the New Grade 9 Mathematics** Curriculum and **Educator Professional** Learning

### For 2021-2022



MPM1D (Academic) and MFM1P (Applied) are no longer offered as of September 2021. These courses can run as credit recovery only until 2023\*

## **Grade 9 Mathematics (MTH1W1)**

#### Here is the new course description:

This course enables students to consolidate, and continue to develop, an understanding of mathematical concepts related to number sense and operations, algebra, measurement, geometry, data, probability, and **financial literacy**. Students will use mathematical processes, mathematical modelling, and coding to make sense of the mathematics they are learning and to apply their understanding to culturally responsive and relevant real-world situations. Students will continue to enhance their mathematical reasoning skills, including proportional reasoning, spatial reasoning, and algebraic reasoning, as they solve problems and communicate their thinking. Prerequisite: None

#### **Professional Learning - Spring 2021:**

Participants: Grade 9 Math Teachers, Special Education Teachers, Guidance Counselors, Student Success Teachers, and Administrators

Session 1: Anti-Racism and Culturally Responsive Pedagogy in Math

March 30, 1, April 6, 8 – afternoon by Area 1/2, 3/4, 5/6, 7/8 respectively

- Understanding Racism; Impact of Implicit Bias on the classroom
- Looking at Education through an anti-racism/anti-oppression lens
- Why de-stream?

Dates:

Session 2: Culturally Responsive Pedagogy and the Thinking Classroom

- Implicit Bias The Planning and Discernment Tool
- Culturally Responsive Pedagogy using the Thinking Classroom as a framework

**Dates:** May 4, 5, 6,7 – TBD – afternoon by Area 1/2, 3/4, 5/6, 7/8 respectively.

Session 3: Curriculum-focused Professional Learning

Dates: June 1, 2, 3, 4 – TBD – afternoon by Area 1/2, 3/4, 5/6, 7/8 respectively

#### **Professional Learning - Fall 2021:**

#### **Continue Professional Learning for:**

- Grade 9 Math Teachers, Special Education Teachers, and Administrators focused on Curriculum-based Culturally Responsive Pedagogy
- Guidance Counselors, Student Success Teachers, and Administrators focused on transition strategies and supports for students

#### **Begin Professional Learning for:**

- Elementary Teachers and Administrators
- Secondary Teachers of Grade 9 all subject areas

#### Focused on:

- Anti-Racism and Culturally Responsive Pedagogy in Math
- Culturally Responsive Pedagogy
- Curriculum-focused Professional Learning

## Stakeholder Input

Ongoing feedback from the following stakeholders will be collected:

- Students
- Parents
- Staff

## Survey

The TCDSB is in the process of implementing De-streamed Grade 9 Mathematics for September 2021. We would appreciate your input to inform our plan. In regards to what was presented at the April 21, 2021 SEAC meeting, please respond to the following:

- 1. What do you feel was positive?
- 2. What concerns/questions, if any, do you have?
- 3. What further supports might be helpful for students of Grade 9 De-Streamed Math?

(survey link will be provided via email)