# COURT OF APPEAL FOR ONTARIO

CITATION: Ontario Teacher Candidates' Council v. Ontario (Education), 2023 ONCA 788 DATE: 20231128 DOCKET: COA-22-CV-0223

Doherty, Nordheimer and Monahan JJ.A.

BETWEEN

Ontario Teacher Candidates' Council and Sara Petrucci

Applicants (Respondents)

and

His Majesty the King in Right of Ontario as represented by the Minister of Education and Education Quality and Accountability Office

Respondents (Appellants)

Yashoda Ranganathan, Ravi Amarnath and Maia Stevenson, for the appellants

Matthew Estabrooks and Wudassie Tamrat, for the respondents

Matthew Horner and Nika Farahani, for the intervener Ontario Human Rights Commission

Susan Luft and Jesse Gutman, for the intervener Ontario Secondary School Teachers' Federation

George Avraam, Jennifer Bernardo and Rono Khan, for the intervener Canadian Constitution Foundation

Heard: October 16, 2023

On appeal from the order of the Divisional Court (Justices Nancy L. Backhouse, E. Ria Tzimas and Sandra Nishikawa), dated December 17, 2021 with reasons reported at 2021 ONSC 7386.

## Monahan J.A.:

#### A. OVERVIEW

[1] The appellants appeal the December 17, 2021 Order of the Divisional Court declaring that the Math Proficiency Test (the "MPT") infringes s. 15(1) of the *Charter* and cannot be justified under s. 1. The Divisional Court found that the MPT had a disproportionate adverse impact on entry to the teaching profession for racialized teacher candidates, and that there were available alternatives to the MPT which could have achieved the government's goals with less impairment of constitutionally protected rights. The Divisional Court ordered the Ontario College of Teachers (the "College") to certify teacher candidates without regard to their results on the MPT, and declared the regulatory and legislative provisions, which either prescribed or permitted the administration of the MPT, to be of no force and effect.

[2] The appellants argue that the Divisional Court's findings should be set aside for a variety of reasons. These reasons include, amongst other things, that the findings were based on incomplete and preliminary data gathered from: (1) a field test of the MPT (the "Field Test"); and (2) the first seven weeks of the official administration of the MPT (collectively, the "July 2021 Data").

[3] In their submissions to this court, the appellants have provided updated data from the administration of the MPT over the entire 2021 year (the "December 2021 Data"). This data shows that by the end of 2021 the disparities in relative success

rates for different demographic groups from the first administration of the MPT were much smaller than those observed in the July 2021 Data.<sup>1</sup> The appellants argue, moreover, that there is no evidence to show that the relatively modest differences in success rates on the MPT as of December 2021 will impact the diversity of the teaching profession in Ontario. In any event, the appellants maintain that it is not discriminatory to require highly educated professionals to demonstrate that they have the minimal competence in math required to educate Ontario elementary school students.

[4] The respondents argue that the Divisional Court properly considered the evidence before it and correctly found that the MPT has a disproportionate impact on racialized candidates, and that the appeal should therefore be dismissed. Specifically, the respondents submit that the Divisional Court was correct in finding that the MPT test is unlikely to improve student performance but will disproportionately exclude candidates from racialized groups by barring them from entering the teaching profession. Although the respondents concede that the December 2021 Data shows that the success rate for racialized candidates who

<sup>&</sup>lt;sup>1</sup> The December 2021 Data is set out in the January 26, 2023 Affidavit of Jennifer Hove (the "Hove Affidavit"), which was admitted on consent as fresh evidence that satisfies the test in *R. v. Palmer*, [1980] 1 S.C.R. 759. Exhibit A to the Hove Affidavit provided EQAO's analysis of demographic data collected from the administration of the MPT in 2021 and is included as Appendix A to these reasons. I note that Ontario sought to introduce additional fresh evidence regarding post-judgment actions taken by the EQAO to review their own policies generally, as well as the EQAO's work to assess and update the MPT (the "Disputed Fresh Evidence"). Given the manner in which I dispose of the appeal, it is not necessary to rule on the admissibility of the Disputed Fresh Evidence.

take the MPT multiple times is comparable to that for non-racialized candidates, they point out that racialized teacher candidates have a much lower success rate on first attempts. The respondents argue that this imposes a disproportionate adverse burden on racialized candidates because the necessity to retake the MPT could delay their entry into the teaching profession, causing them to lose out on employment opportunities even if they ultimately succeed in passing the MPT.

[5] For the reasons that follow, I would allow the appeal and set aside the order of the Divisional Court.

[6] The Divisional Court made its findings based on the July 2021 Data, which recorded the results from the approximately 3600 candidates who had attempted the MPT by July 26, 2021. The July 2021 Data disclosed that as of July 26, 2021, White candidates had passed the MPT at a materially higher rate than had racialized candidates.

[7] The July 2021 Data before the Divisional Court provided a preliminary and incomplete basis for assessing the impact of the MPT on entry to the teaching profession. Candidates who had not passed the MPT could rewrite the test an unlimited number of times, and fewer than half of the candidates who would eventually attempt the MPT in 2021 had done so by July 26, 2021. This was an insufficient evidentiary record that failed to discharge the respondents' onus under s. 15(1) of the *Charter*.

[8] The December 2021 Data discloses that of the 8350 candidates who attempted the MPT one or more times during 2021, 95% were successful, including 93% of candidates from racialized groups. Moreover, had the MPT been available in 2022, candidates who had not succeeded in 2021 would have had the opportunity to retake the test. Thus, the ultimate disparities in relative success rates between different demographic groups might well be even smaller than the relatively modest differences observed in the December 2021 Data.

[9] The respondents' argument that the adverse impact of the MPT on entry to the teaching profession should be measured on the basis of the results from first attempts of the MPT (as opposed to multiple attempts) is misplaced. Teacher candidates who do not succeed on their first attempt but are successful on a subsequent attempt are not barred from entry to the profession. Thus, with respect, there is an unsupported leap in logic from the observation that there are disparities in success rates on first attempts at the MPT to the conclusion that this demonstrates an adverse impact on entry to the teaching profession. Nor is there any evidence to support the respondents' claim that racialized candidates who are required to write the test more than once are, by that fact alone, experiencing a disproportionate adverse impact. The respondents have not shown that any of the candidates who wrote the MPT in 2021 multiple times were delayed in entering the profession, much less that any of them lost out on job opportunities as a result.

[10] In short, I am unable to conclude, based on the record before this court, that the MPT has, or will have, a disproportionate impact on the entry to the teaching profession by racialized teacher candidates.

[11] I further find that the MPT is not discriminatory by reinforcing, perpetuating or exacerbating disadvantages distinctly experienced by racialized candidates. I accept the Divisional Court's finding that there is a significant "diversity gap" in the teaching profession in Ontario. But the uncontradicted expert evidence is that the MPT is designed to test teacher candidates' knowledge of mathematical ideas that any individual who has completed a high school level education could reasonably be expected to understand. This opinion is confirmed by the fact that over 98% of teacher candidates who attempt the test multiple times (including over 98% of racialized candidates who do so) successfully pass the test. Moreover, in developing the MPT, the EQAO was alive to potential equity concerns associated with a standardized teacher competency test and reviewed all MPT questions for bias and sensitivity to equity issues.

[12] I would therefore hold that the Divisional Court erred in finding that the MPT violated s. 15(1) of the *Charter* and would set aside the Court's order on that basis. I do not find it necessary to consider whether, had I found a *Charter* s. 15 violation, any such breach could have been justified pursuant to s. 1.

## B. BACKGROUND

## (1) All Certified Teachers in Ontario May be Assigned to Teach Math

[13] In order to teach in public elementary or secondary schools on an ongoing basis in Ontario, teachers must have a certificate of qualification and registration from the College. This generally requires completion of a three or four-year undergraduate degree, followed by a two-year Bachelor of Education ("B. Ed.").

[14] All certified teachers in Ontario may be assigned to teach math to students in Grade 6 or below. In order to be qualified to teach math beyond Grade 6, additional qualifications in mathematics are generally required. However, regulations under the *Ontario College of Teachers Act*, 1996, S. O. 1996, c. 12 (the "*OCTA*") permit a principal to assign a teacher to teach in a division or subject not listed on their certificate by agreement of the teacher and principal, with the approval of a supervisory officer.<sup>2</sup> Therefore, even a teacher without additional qualifications in math can be asked to teach math to students in Grades 7 to 12.

[15] Due to the competitive nature of teaching positions, newly certified teachers may find that the only available opportunities are positions that require them to teach math, regardless of whether this was their original intention. When few

<sup>&</sup>lt;sup>2</sup> See Operation of Schools-General, R.R.O. 1990, Reg. 298, s. 19.

teaching positions are available, new teachers will often agree to teach subjects or divisions outside those on their teaching certificate.

# (2) The Development of the MPT

[16] There was a marked decline in Ontario elementary students' math scores between 2015 and 2019, as measured by the EQAO. In response, in 2019, Ontario amended the *OCTA* to add a requirement that teacher candidates successfully complete any prescribed examinations relating to mathematics before obtaining a certificate of qualification from the College.<sup>3</sup> The government subsequently enacted a regulation mandating the EQAO to develop and implement the MPT.<sup>4</sup>

[17] The EQAO undertook a literature review (the "Literature Review") to inform itself of the connection between compulsory teacher competency testing and student outcomes and to assist in the development of the MPT. The Literature Review concluded, amongst other things, that standardized teacher competency tests could have potential negative impacts on marginalized groups, resulting in a possible decrease in the availability of qualified teachers.

[18] In an effort to address these concerns, the EQAO sourced questions for the math component of the MPT from its bank of questions used for Grades 3, 6 and 9 student assessments in both French and English. These questions had already

<sup>&</sup>lt;sup>3</sup> See s. 18 (1) (c) of the OCTA.

<sup>&</sup>lt;sup>4</sup> See Proficiency in Mathematics, O. Reg. 271/19.

gone through a first review against a rubric that factored in identity, social justice and equity issues. The EQAO also engaged a committee of external members of the College as well as internal EQAO staff to conduct a second review of all MPT questions for bias and sensitivity to equity issues.

[19] The EQAO was also guided by a Governance Steering Committee (the "Steering Committee"), consisting of representatives from various organizations including the College, deans of education, and the Council of Ontario Universities. The Steering Committee recommended substantive changes and exemptions to the MPT that were adopted by the Ministry, including reducing the difficulty level of the MPT to test up to Grade 9 math (instead of Grade 11 math, as was originally contemplated) and creating an exemption for teacher candidates intending to teach only Native Languages.

[20] The EQAO first ran a Field Test and developed a voluntary demographic questionnaire to monitor results on specific test items for equity seeking groups and to revise the MPT accordingly. The Field Test consisted of a draft version of the MPT which was field-tested from February 18 to March 7, 2021. A total of 4065 teacher candidates participated in the Field Test, with 81% successfully completing the MPT. The EQAO revised the draft MPT in light of the experience with and results from the Field Test.

#### (3) First Administration of the MPT

[21] The MPT was officially administered in two testing windows in 2021, from May 10 - August 20 and September 27 - December 15, a 27-week period. Candidates at any stage of their two-year B. Ed. program could write the MPT in either English or French. Although it was designed to be completed in two hours, candidates were given three hours to write the test.

[22] The MPT was computer-based and was composed of 75 multiple-choice type questions. Approximately two-thirds of the MPT focused on mathematics, drawing on questions from EQAO's assessment of Grades 3, 6 and 9 students. Candidates were permitted to use an online calculator in answering the vast majority of the math content questions.

[23] The remaining one third of the MPT focused on math pedagogy, assessing candidates' understanding of the mathematics curriculum, student learning, as well as assessment and evaluation practices.

[24] Candidates were required to achieve a score of 70% on both the math content and pedagogy sections of the test.

[25] The EQAO was required to provide candidates with their test results within 10 days of taking the test, including feedback on their performance on the math content portion of the test. Candidates could rewrite the MPT an unlimited number of times. The Registrar of the College was only informed of the results if a candidate successfully completed the test.<sup>5</sup>

[26] There was no fee for writing (or rewriting) the test in 2021. It was anticipated that as of January 1, 2022, there would continue to be no fee for first attempts of the MPT, but a fee of an unspecified amount would be payable for subsequent attempts.

# (4) Results of the First Administration of the MPT

[27] The December 2021 Data, which sets out the results from the first administration of the MPT,<sup>6</sup> indicates that the vast majority (approximately 95%) of candidates who wrote the MPT in 2021 were successful, either on their first or subsequent attempts.

[28] This emerges from the following:

- a total of 8349 candidates wrote the MPT in 2021;
- 6948 candidates (approximately 83.2%) were successful on their first attempt, while 1401 candidates were unsuccessful;
- of the 1401 candidates who were unsuccessful on their first attempt, 1100 retook the test one or more times;

<sup>&</sup>lt;sup>5</sup> See O. Reg. 271/19, ss. 4 (4) & (6).

<sup>&</sup>lt;sup>6</sup> See Appendix A, which provides a detailed breakdown of the December 2021 Data.

- of the 1100 candidates who retook the test, 969 (or 88%) were successful on a subsequent attempt;
- therefore, of the 8349 candidates who wrote the test, 7917 (94.8%) were successful, while 432 (5.2%) were unsuccessful.

[29] It should also be noted that of the 432 candidates who attempted but did not pass the MPT by December 2021, 301 wrote the test only once, while 131 wrote the test 2 or more times, a point to which I will return later in these reasons.

[30] The voluntary demographic questionnaire was completed by 6164 of the candidates, and the EQAO undertook a demographic analysis of these candidates' results.<sup>7</sup>

[31] The demographic analysis indicates that candidates self-identifying as White had a 97.3% success rate,<sup>8</sup> whereas racialized candidates<sup>9</sup> had a success rate of 93.3%.<sup>10</sup> However, it should be noted that the success rate for two of the racialized categories was lower than that for racialized candidates generally: (i) Black candidates, who had a success rate of 90.2%;<sup>11</sup> and (ii) Indigenous candidates, who had a success rate of 72.3%.<sup>12</sup>

<sup>&</sup>lt;sup>7</sup> The EQAO's demographic analysis is included in Appendix A.

<sup>&</sup>lt;sup>8</sup> i.e., 3733 of 3838 candidates.

<sup>&</sup>lt;sup>9</sup> Consistent with the approach taken by the Divisional Court, 'racialized' candidates includes those who self-identify as Black, East/Southeast Asian, Indigenous, Latinx, Middle Eastern, South Asian and mixed race. See Appendix A to the Divisional Court reasons.

<sup>&</sup>lt;sup>10</sup> i.e., 1446 of 1552 candidates.

<sup>&</sup>lt;sup>11</sup> i.e., 333 of 369.

<sup>&</sup>lt;sup>12</sup> i.e., 34 of 47.

[32] The EQAO analysis cautions that there were very small numbers of test takers from certain demographic groups, particularly Indigenous, Latinx and "another race category", and thus the results for these groups are less reliable and more difficult to generalize as being representative of results for the overall potential test taker population.

[33] The EQAO also found that there were no significant associations between success rates and characteristics of gender identity, sexual orientation, exceptionality, or whether the test was written in English as opposed to French.

# C. THE DIVISIONAL COURT DECISION

#### (1) Evidence Before the Divisional Court

#### (a) Quantitative Evidence

[34] As noted above, the Divisional Court had before it the July 2021 Data, consisting of the results of the Field Test and data from the first seven weeks of the official administration of the MPT. While the success rate on the Field Test had been 81%, the overall success rate for the approximately 3600 teacher candidates who attempted the MPT between May 10, 2021 and July 26, 2021 was 87%.

[35] Approximately 2800 of the 3600 candidates who attempted the MPT by the July 26, 2021 cutoff date filled out the voluntary demographic questionnaire.

The results from those who provided demographic information<sup>13</sup> reflected significant disparities in relative success rates for test takers in different race categories. For example, as of July 26, 2021, 70% of Black candidates<sup>14</sup> and 71% of Indigenous candidates<sup>15</sup> passed the MPT, as compared with 92% of East/Southeast Asian candidates and 91% of White candidates.<sup>16</sup> However, the EQAO noted that these differences needed to be interpreted with caution given the small numbers of test takers from certain demographic groups, including Indigenous and Latinx.<sup>17</sup>

[36] There were 474 candidates who were unsuccessful on their first attempt at the MPT as of July 26, 2021. Slightly less than half of them had retaken the test by the July 26, 2021 cutoff date.<sup>18</sup> Notably, 85% of those writing the test two or more times had passed the test.<sup>19</sup> However, relatively few of the candidates who retook the test by July 26, 2021 provided demographic information.<sup>20</sup>

<sup>&</sup>lt;sup>13</sup> Approximately 300 candidates filled out the demographic questionnaire but selected "I prefer not to answer" when asked to provide their race.

<sup>&</sup>lt;sup>14</sup> i.e., 116 of 165 candidates.

<sup>&</sup>lt;sup>15</sup> i.e., 10 of 14 candidates.

<sup>&</sup>lt;sup>16</sup> i.e.,1593 of 1760 candidates.

<sup>&</sup>lt;sup>17</sup> Just 14 candidates identified as Indigenous and 34 as Latinx. However, the numbers of most of the other race categories were also small; apart from White candidates and those who preferred not to answer, no race category in the July 2021 Data set had more than 200 candidates.

<sup>&</sup>lt;sup>18</sup> Of the 474 candidates who were unsuccessful on their first attempt, 215 of them had retaken the test by July 26, 2021.

<sup>&</sup>lt;sup>19</sup> As of July 26, 2021, 182 of the 215 re-takers passed the test.

<sup>&</sup>lt;sup>20</sup> Only 121 candidates who retook the test by the July 26, 2021 cut-off date provided demographic information, and 29 of them indicated that they preferred not to answer. Of the remaining 92 candidates: 55 were White, 14 were Black, 1 was Indigenous, 7 were East/Southeast Asian, 6 were Middle Eastern, 3 were Latinx, 1 was South Asian, 2 were "another race category", and 3 were mixed race.

[37] This left 259 candidates, or 7.2% of the entire candidate pool, who had been unsuccessful on their first attempt and had not retaken the test as of the July 26, 2021. No information was available to the Divisional Court regarding this group, including their stage in the B. Ed program, and whether any of them intended to retake the test sometime after July 26, 2021.

#### (b) Expert Evidence

[38] The respondents tendered an expert report from Dr. Mary Reid of the Ontario Institute for Studies in Education. Her report addressed two questions: (i) is the MPT likely to result in fewer minorities and people of colour being certified as teachers in Ontario; and (ii) is the MPT likely to accomplish its stated goal of improving student math scores?

[39] Dr. Reid reviewed the extensive literature on the impact of teacher certification testing in the United States and United Kingdom. Dr. Reid's report explains how this literature overwhelmingly concludes that what she describes as "high-stakes teacher testing" has detrimental effects on racial diversity within the teaching population.

[40] For example, a recent analysis of data from 23 U.S. states shows that over a three-year period, 38% of Black teacher candidates passed the mandatory teacher certification test after three attempts, as compared to 72% of Hispanic and 88% of White teacher candidates.

[41] Although she did not review the MPT itself, Dr. Reid assumed that the MPT would work similarly to teacher certification tests utilized in the U.S. and the U.K. On that basis, she concluded that the MPT is likely to result in fewer historically marginalized and racialized persons being certified as teachers in Ontario.

[42] Dr. Reid also concluded that the literature demonstrates little connection between teacher testing and teacher quality. She found that there is empirical data that points to an association between teacher test scores and student performance, but that association is limited and does not demonstrate a causal relationship between teacher test scores and student test scores.

[43] The appellants tendered an expert report from Dr. Ann Kajander, an expert in math pedagogy. Based on her academic research, as well as her own observations of teacher candidates, teachers who have a better understanding of mathematics are more effective math teachers, resulting in better student performance. This conforms to academic research that has found a direct link between teacher mathematics knowledge and student achievement.

[44] Dr. Kajander explains that all qualified teachers in Ontario can be required to teach math up to Grade 6, and many also teach math up to Grade 8. In her opinion, therefore, it is essential that all qualified teachers be able to demonstrate mathematical competency to the Grade 9 level.

[45] Dr. Kajander examined the mathematics portion of the MPT and found that it barely addresses Grade 9 mathematics content, with most of the questions testing knowledge well below the Grade 9 level. In her opinion, the MPT measures mathematical ideas that any individual who has completed a high school level education in Ontario could reasonably be expected to understand and is a more than reasonable requirement for graduating teachers.

[46] While Dr. Kajander believes that the level of difficulty of the MPT is below the ideal, it is nevertheless at least a start in the right direction. In her opinion, a key benefit of the test is that it will encourage teacher candidates who do not feel confident in mathematics to acquire needed mathematics knowledge. It will also encourage an explicit focus on mathematical competency during all B. Ed programs in Ontario.

#### (c) Qualitative Evidence

[47] The respondents tendered the affidavit of Richard Nyelade, a B. Ed. student at the University of Ottawa's Toronto campus. Mr. Nyelade is a sociologist/anthropologist who immigrated to Ontario in 2018. He has master's degrees from Cameroon and Norway and began a Ph.D. program in China.

[48] In his affidavit he expresses concern that the MPT will discourage candidates like himself, who are newcomers to Ontario and who learned math in other countries, from becoming teachers. One of his concerns was that the MPT

could only be taken on a computer. He had never used a computer or calculator for math and has never taken a computer-based math test.

[49] Mr. Nyelade was also concerned that his B. Ed program did not have a course on the math content of the Ontario curriculum. The faculty did have one pedagogy course for teaching math up to grade 6 but this course did not focus on substantive math concepts. He points out that 70% of the MPT focuses on mathematical knowledge, and only 30% on math pedagogy. He was therefore concerned that he was at a disadvantage compared to his colleagues when taking the MPT.

[50] Mr. Nyelade's first language is French. He was told by several teacher candidates who took the Field Test that there were issues with the quality of the French translation of the test. He believes that the MPT is creating a barrier that will make it more difficult for him and his peers to provide Ontario students with the diverse education that Ontario's curriculum requires.

[51] At the time Mr. Nyelade swore his affidavit, he had not yet had an opportunity to write the MPT. He was cross-examined on his affidavit on September 1, 2021. At that time, he confirmed that he wrote the MPT in French three times between May 22, 2021 and June 30, 2021. In his first attempt on May 22, 2021, he passed the substantive math portion of the MPT but was unsuccessful on the pedagogy portion of the test. He wrote the test a second time on May 29, 2021 at which time

he was again successful on the math portion but unsuccessful on the pedagogy portion. On his third attempt, on June 30, 2021, he passed both the math and the pedagogy portion of the MPT.

# (2) The Divisional Court's Reasons

[52] The Divisional Court first considered whether the appellants had shown that the MPT infringes s. 15 of the *Charter*.

[53] Relying on the Supreme Court's decision in *Fraser v. Canada (Attorney General)*, 2020 SCC 28, 450 D.L.R. (4th) 1, the Divisional Court indicated that in order to show a *prima facie* breach of s. 15, an applicant must show that the law or state action:

- (i) on its face or in its impact creates a distinction based on enumerated or analogous grounds ("Step 1"); and
- (ii) imposes burdens or denies benefits in a manner that has the effect of reinforcing, exacerbating or perpetuating disadvantage ("Step 2").

[54] The Divisional Court noted that *Fraser* confirms that s. 15 protects against adverse impact discrimination, which occurs when neutral laws have a disproportionate impact on members of enumerated or analogous groups. *Fraser* also provided guidance as to the type of evidence that would be helpful in proving a disproportionate impact on members of a protected group, including evidence about the circumstances of the claimant group as well as evidence about the results produced by the challenged law. This could include statistical evidence showing a disparate pattern of exclusion or harm that is statistically significant and not simply the result of chance. There is, however, no universal measure for what level of statistical disparity is necessary to demonstrate disproportionate impact and the court should not craft rigid rules on this issue.

[55] In its analysis under Step 1 of the s. 15 inquiry, the Divisional Court noted that there were significant disparities in success rates for racialized candidates as compared to White candidates amongst those who attempted the MPT by July 26, 2021. The Court pointed out, in particular, that the pass rate for Black teacher candidates was 70% and for Indigenous candidates was 71%, as compared to a pass rate for White teacher candidates of 90%.

[56] The Divisional Court acknowledged that a high proportion of teacher candidates who had attempted the test multiple times were ultimately successful. However, the Court found that having to retake the test multiple times imposes additional burdens in terms of time, money, and energy that will be disproportionately experienced by racialized teacher candidates, even if they pass in the end.

[57] The Divisional Court also pointed out that the ability to retake the test does not address those candidates who opt not to take advantage of this option. The Court expressed concern that over 7% of total test takers had not retaken the test as of July 26, 2021. The Court acknowledged that it is possible that some of these candidates had since re-attempted the MPT, but that evidence was not available for the hearing. The Court expressed concern that the appellants had not conceived of a means to follow-up with the significant proportion of teacher candidates who had not rewritten the MPT.

[58] The Divisional Court acknowledged that the available data on the impact of the MPT is somewhat limited. However, the Court rejected the appellant's submission that further time is required to assess whether the MPT has an adverse impact on racialized teacher candidates. The Court characterized the appellant's submission in this regard as "akin to suggesting that more racialized candidates must attempt and fail the MPT to accumulate the data necessary to show a disproportionate impact." In the Court's view, "the fact that a greater adverse impact could be demonstrated over time does not mean that there is no adverse impact now."

[59] On this basis, the Court concluded that the respondent had satisfied its burden under Step 1 and demonstrated that the MPT has a disproportionate adverse impact on racialized teacher candidates.

[60] In considering Step 2 of the s. 15 inquiry, the Divisional Court found that the significantly lower pass rate for racialized teacher candidates means that fewer racialized, especially Black and Indigenous, candidates will be able to become

teachers and enter the profession. The Court noted that the ability to retake the test multiple times "alleviates the burden to some degree" by ensuring that some of those candidates do ultimately become teachers. However, the Court reiterated its earlier finding that having to take the test multiple times imposes additional burdens on racialized teacher candidates. For example, having to retake the test might mean that a candidate will miss out on employment opportunities and be unable to earn income in the interim.

[61] The Divisional Court concluded that the Respondent had satisfied both Step 1 and Step 2 of the s. 15 test and established a *prima facie* breach of s. 15.

[62] Turning to whether the MPT was a reasonable limit under s. 1 of the *Charter*, the Court agreed with the appellants that the objective of improving student math achievement is a pressing and substantial purpose, and that the MPT is rationally connected to that purpose. However, the Court found that mandating math courses in a B. Ed. Program would be a more effective measure in achieving the government's objective and would be less impairing of equality rights. The Court also found that the deleterious effects on diversity in the teaching profession outweighed the salutary effects of encouraging teacher candidates to focus more on math skills. Accordingly, the Court concluded that the appellant had failed to demonstrate that the MPT is a reasonable and justifiable limit on the respondents' right to equality.

[63] In addition to finding that the MPT violated s. 15(1) of the *Charter*, is not justified under s. 1 and is unconstitutional, the Court declared both O. Reg. 271/19, *Proficiency in Mathematics*, and s. 18(1)(c) of the *OCTA*, to be unconstitutional and of no force and effect.

# D. ISSUES

[64] The parties agree that the following issues arise on this appeal:

- (a) Did the Divisional Court err in finding a *prima facie* breach of s. 15(1) of the *Charter*, either at Step 1 or Step 2 of the s. 15 inquiry; and
- (b) Did the Divisional Court err in holding that any infringement of s.15(1) caused by the MPT is not justified under s. 1 of the *Charter*?

# E. STANDARD OF REVIEW

[65] It is agreed that pursuant to the Supreme Court's decision in *Canada (Minister of Immigration and Citizenship) v. Vavilov*, 2019 SCC 65, [2019] 4 S.C.R. 653, at para. 55, constitutional questions are reviewed on a standard of correctness.

# F. DISCUSSION: DOES THE MPT VIOLATE S. 15(1) OF THE CHARTER?

# (1) Governing Principles

[66] As the Divisional Court explained, it is well established that there are two requirements that must be satisfied by a claimant seeking a finding that a challenged law or state action infringes s. 15(1) of the *Charter*:

- the challenged law or state action creates a distinction, on its face or in its impact, on the basis of an enumerated or analogous ground; and
- (ii) the distinction imposes a burden or denies a benefit in a discriminatory manner, by having the effect of reinforcing, perpetuating or exacerbating disadvantage: *Fraser*, at para. 27; *Ontario v. G*, 2020 SCC 38, 451 D.L.R. (4th) 541, at paras. 40 to 42; *R. v. Sharma*, 2022 SCC 39, 165 O.R. (3d) 398, at paras. 28, 188.

[67] Where the claimant alleges that a law which is neutral on its face violates s. 15 because of its adverse effects or impacts, the claimant must show that the law has a "disproportionate impact" on members of a protected group. Such a disproportionate impact can be proven in different ways, including if there are clear disparities in how a law affects the claimant's group as compared to other comparator groups: *Fraser*, at paras. 62-63.

[68] The Supreme Court has resisted crafting rigid rules on this issue, other than affirming that the goal of statistical evidence is ultimately to establish "a disparate pattern of exclusion or harm that is statistically significant and not simply the result of chance": *Fraser*, at para 59. At the same time, the Court has cautioned about the potential shortcomings of statistical evidence, noting that such evidence may be unreliable: *Fraser*, at para 60.

[69] Step 2 of the s. 15 inquiry, whether the distinction imposes a burden or denies a burden in a discriminatory manner, will be satisfied if the challenged law creates a distinction that reinforces, perpetuates or exacerbates a disadvantage that exists independently of the impugned distinction: *Quebec (Attorney General) v. Alliance du personnel professional et technique de la santé et des services sociaux*, 2018 SCC 17, [2018] 1 S.C.R. 464, at paras. 25-28. Evidence that a law is based on stereotypes or "prejudicial notions" about members of protected groups, or that it withholds access to benefits or imposes burdens arbitrarily, are relevant considerations, but need not be proven in order to establish discrimination: *Sharma*, at para. 53.

# (2) The Divisional Court Erred in Finding that the MPT Has a Disproportionate Adverse Impact on Entry to the Profession for Racialized Teacher Candidates

[70] As noted above, the Divisional Court found that that the MPT had a disproportionate adverse impact on entry to the teaching profession for racialized candidates, based largely on results from the first seven weeks of the administration of the MPT. This data was both incomplete and preliminary and, in my view, provided an insufficient basis for the findings of the Divisional Court.

[71] This data was incomplete in the sense that less than half of the candidates who would eventually write the MPT in 2021 had done so by July 26, 2021. A further complication was that not all of those who wrote the test by July 26, 2021 had completed the voluntary demographic questionnaire. This meant the number of candidates who had self-identified as members of racialized groups as of that

date was quite small, representing a fraction of the total number of MPT test takers in 2021.<sup>21</sup> Moreover, because the absolute numbers were small, relatively small changes in the numbers would have an outsized impact on the success rate (expressed in percentage terms) for racialized candidates. While neither expert evidence nor evidence of statistical disparity is mandatory to show disproportionate impact, evidence of statistical disparity can vary, have significant shortcomings, and give rise to the possibility of unreliable results: *Fraser*, at paras. 60, 67. The Divisional Court did not explain why it was appropriate to draw firm conclusions about the impact of the MPT on racialized teacher candidates in Ontario from such a small sample size.

[72] The small number of racialized candidates who had completed the MPT before July 26, 2021 was further complicated by the fact that the data was preliminary: unsuccessful candidates could re-write the test an unlimited number of times. By July 26, 2021, relatively few unsuccessful candidates had rewritten the MPT, although many more would do so after that date. Significantly, candidates who re-wrote the test were highly likely to succeed, thereby satisfying the MPT requirement for admission to the College.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> See notes 14-18, above.

<sup>&</sup>lt;sup>22</sup> 215 candidates of 474 unsuccessful candidates, had rewritten the MPT by July 26, 2021 (~45%). Of those 215 who rewrote the test, 182 test takers (~85%) had been successful. By December 2021, 1100 candidates had rewritten the test, with 969 (~88%) of them succeeding.

[73] The high success rate of those rewriting the MPT, combined with the small numbers of candidates from demographic groups who had attempted the MPT by July 26, 2021, meant that the "success rate" for candidates from those groups would almost certainly rise significantly over the balance of 2021.

[74] This was (or should have been) apparent even as of July 26, 2021. For example, the success rate for Black candidates had risen 7% by July 26, 2021 simply by virtue of the fact that an additional 12 candidates had successfully passed the test on a subsequent attempt by that date.<sup>23</sup>

[75] There was no particular magic to the July 26, 2021 cutoff date, other than the fact that the EQAO had not been able to tabulate results beyond that date in time for the Divisional Court hearing. The Divisional Court only had before it the results for candidates who had written the test by July 26, 2021. The appellants therefore urged the Court to wait until more candidates had an opportunity to write (and rewrite, if necessary) the MPT, which would have provided a more complete evidentiary foundation upon which to determine whether the MPT violated s. 15.

[76] The Divisional Court refused the appellants' invitation to await further results before making such a binding determination on two grounds: (i) there were additional burdens borne by candidates who had to rewrite the test, including a

<sup>&</sup>lt;sup>23</sup> Of the 165 Black candidates who wrote the MPT by July 26, 2021, 104 had succeeded on their first attempt, 12 on a subsequent attempt, for a total of 116 of the 165 successful as of that date.

delay in being admitted to the College, which were disproportionately imposed on racialized candidates; and (ii) awaiting further results was wrong because it meant that more racialized candidates would be required to attempt and fail the MPT.

[77] In my respectful view, the Divisional Court made palpable and overriding errors in these findings, neither of which justified its decision to rule on the constitutionality of the MPT based on such incomplete and preliminary data.

[78] The difficulty with the first justification – the adverse impact on racialized candidates from having to rewrite the MPT – was simply a lack of evidence to support it. The only potential evidence in this regard was that of Richard Nyelade, who had agreed in cross-examination in September 2021 that he had written the test three times between May 22, 2021 and June 30, 2021, succeeding on the third attempt. But Mr. Nyelade made no reference either in his affidavit or his cross-examination to having experienced any difficulties from having to rewrite the test. Nor, given the fact that he was able to write the test three times in the space of about five weeks, was there any reason to believe that Mr. Nyelade's admission to the College had been delayed by the fact that he had not succeeded on his first attempt. Nor did Mr. Nyelade suggest that he had lost out on job opportunities by having to rewrite the MPT.

[79] There was also good reason to expect that the requirement to write the MPT in the future would not cause any material delay in candidates' being admitted to

the College, even if they had to rewrite the test one or more times. This is because candidates were not required to wait until they had completed their B. Ed program before writing the MPT. Thus, candidates who were concerned over whether they had sufficient math knowledge to pass the MPT had the opportunity to write the test multiple times prior to graduating from their two-year B. Ed. program.

[80] Turning to the second reason why the Divisional Court felt it necessary to rule immediately on the constitutionality of the MPT, namely, that any delay simply meant that more racialized candidates would be required to attempt and fail the MPT, this inference was unavailable on the facts. Further, it was speculative. Ironically, the opposite turned out to be true. The December 2021 Data shows that far more racialized candidates were ultimately successful on the MPT, both in absolute and percentage terms, than was the case as of July 26, 2021. Even the limited evidentiary record before the Court showed that pass rates had markedly increased for those who had rewritten the MPT. In other words, providing additional time for teacher candidates to write the MPT over the entire 2021 year would have improved rather than worsened the position of racialized candidates relative to non-racialized ones.

[81] A sufficient evidentiary record is not a mere technicality. It is essential in all cases and particularly in constitutional litigation, which frequently engages concepts and principles that are of fundamental importance to Canadian society, and which may profoundly affect the lives of Canadians: *MacKay v. Manitoba*,

[1989] 2 S.C.R. 357, at pp. 361-62. In this case, the respondents brought their application for judicial review in February 2020, before the MPT had even been piloted. This necessarily limited the record. By the time of the hearing, the Divisional Court had before it only the results of teacher candidates who had written the test by July 26, 2021. Yet by the time the application was argued in October 2021, thousands of additional teacher candidates had written the MPT, and many more would do so by the time the Court released its decision in December 2021. The Court declared the MPT to be unconstitutional without any information as to the results of these post-July 26, 2021 writers of the test. Given this preliminary and incomplete record the respondents failed to discharge their onus under s. 15. The Divisional Court's finding that the MPT violated s. 15 of the *Charter* must be set aside on this basis alone.

(3) The Evidence from the 2021 Administration of the MPT Fails to Establish that it has had a Disproportionate Adverse Impact on Racialized Candidates

[82] There is now much more complete information about the impact of the MPT on racialized teacher candidates, in the form of the December 2021 Data. While the Divisional Court's declaration of unconstitutionality may well have been premature, does the December 2021 Data now make such a declaration appropriate?

[83] In my view, the answer to this question is "no".

[84] I note, first, that the December 2021 Data shows that the ultimate success rate for racialized teacher candidates (93%) was comparable to that for White candidates (97%). Although the success rate for Black and Indigenous candidates was somewhat lower than the 93% success rate for all racialized candidates, the number of Indigenous candidates who attempted the MPT in 2021 was relatively small, and the success rate for Black candidates was a little over 90%, comparable to that of all racialized teacher candidates.

[85] It is clear from these results that the design and operation of the MPT in Ontario in 2021 was quite different from that experienced in the United States and the U.K., as detailed in the expert report of Dr. Reid. Dr. Reid noted very wide disparities in success rates on standardized teacher tests in these jurisdictions, with White candidates often succeeding twice as often as racialized ones. That experience was obviously not replicated in Ontario during the first 27 weeks of the administration of the MPT.

[86] Moreover, the relatively modest difference in the MPT success rate for racialized as compared with White candidates is far smaller than the disparities that have been found in the past to constitute a "disproportionate impact" on a protected group for purposes of analysis under s.15 of the *Charter*.

[87] For example, in the oft-cited U.S. Supreme Court case of *Griggs v. Duke Power Co.*, 401 U. S. 424 (1971), the requirement that employees have a high school diploma was satisfied by 34% of White employees but only 12% of Black employees, while the requirement to pass standardized tests resulted in 58% of those who identified as White passing the tests, as compared with only 6% of Black identifying individuals. The aerobic fitness requirement in *British Columbia (Public Service Employee Relations Commission) v. BCGSEU*, [1999] 3 S.C.R. 3 ("*Meiorin*"), could be satisfied by 65 - 70% of men but only 35% of women. In *Fraser*, the failure of the RCMP's pension plan to grant job-sharers the ability to buy-back full-time pension benefits disproportionately affected women, since 100% of the participants in the job-sharing program between 2010 and 2014 were women.

[88] In each of these cases, there was what Abella J. described in *Fraser* (at para. 63) as "clear and consistent statistical disparities in how a law affects the claimant's group" sufficient to establish a disproportionate impact on the protected group.

[89] No such clear and consistent disparities are evident from the first administration of the MPT in 2021. Not only are the differences in success rates between racialized and non-racialized candidates much smaller than in the relevant precedents, but the December 2021 Data is not final. This is because approximately 300 of the candidates who unsuccessfully wrote the test in 2021 did not attempt the test a second time.

[90] We now know that a high proportion of candidates who did not pass the test on their first attempt succeeded in subsequent attempts by December 2021. What we do not know is: (i) when during 2021 these 300 candidates who did not pass the test on their first attempt actually wrote the test; (ii) why they did not attempt to rewrite it by December 2021; and (iii) whether any of them would have rewritten the test in 2022 had they been provided with the opportunity to do so. The point is simply that had the MPT been offered in 2022, it is possible that some proportion of those 300 candidates would have attempted and passed the test, thereby raising the overall success rate for both racialized and non-racialized candidates beyond that observed in the December 2021 Data.

[91] The respondents argue that although racialized candidates' success rates are comparable to those for other candidates when multiple attempts of the MPT are factored in, the impact of the MPT on entry to the teaching profession should be measured based on success on first attempts of the test. They argue that having to write the test multiple times is itself a disproportionate impact on racialized candidates, since this may delay their entry to the profession and cause them to lose out on employment opportunities. [92] I do not agree. In my view, the only way to accurately assess the impact of the MPT on entry to the teaching profession is to take into account all those candidates' who pass the test, whether on their first or subsequent attempts. This reason is simple: candidates who pass the MPT, whether on their first or a subsequent attempt, are not being denied entry to the teaching profession by virtue of the test. Thus, to ignore the results of those who have passed the MPT but required more than one attempt to do so does not accurately reflect the impact of the test on entry to the profession.

[93] This was implicitly recognized by the Divisional Court itself, which took into account all those who had passed the test by July 26, 2021, whether on their first or subsequent attempts.<sup>24</sup> Likewise, the respondents' expert, Dr. Reid, assessed the impact of standardized testing on entry to the teaching profession in the United States and the U.K. based on pass rates on multiple attempts of the relevant test.

[94] I would also note that, for reasons explained above, the respondents' claim that having to write the test multiple times will delay entry to the teaching profession lacks an evidentiary foundation and is essentially speculative. The only evidence in this regard is that of Richard Nyelade, who did not suggest that his entry to the profession was delayed by having to write the test three times in May and June of

<sup>&</sup>lt;sup>24</sup> Although the Divisional Court was of the view that having to write the MPT multiple times had an adverse impact on racialized candidates, in determining the success rate for racialized candidates it took into account all those candidates who had passed the test by July 26, 2021, whether on first or multiple attempts.

2021. As Abella J. noted in *Kahkewistahaw First Nation v. Taypotat,* 2015 SCC 30, [2015] 2 S.C.R. 548, at para. 34, claims of adverse effect discrimination must be supported by evidence, rather than merely a 'web of instinct'.

[95] I conclude, therefore, that the respondents have not established on a balance of probabilities that the MPT has a disproportionate adverse impact on racialized candidates. On this basis alone, the MPT does not violate s. 15(1) of the *Charter*.

# (4) The Respondents Have Not Established that the MPT is Discriminatory, by Having the Effect of Reinforcing, Perpetuating or Exacerbating Disadvantage

[96] Although not strictly necessary to dispose of this appeal, I also find that, based on the record before the court, the respondents have not established that the MPT was discriminatory, in the sense that it demonstrably perpetuated, exacerbated or reinforced the existing disadvantage of racialized teachers in Ontario.

[97] I accept the finding of the Divisional Court that there is a significant "diversity gap" in the teaching profession in Ontario, such that 26% of Ontario students are racialized but only 13% of teachers are racialized. I also accept the Divisional Court's finding that racialized students, in particular Black and Indigenous students, benefit and perform better when they have racialized teachers. As the

Divisional Court noted, a lack of role models in the education system creates a vicious cycle, since students, who do not see themselves represented, do not aspire to become teachers.

[98] Nevertheless, despite the clear evidence of disadvantage associated with their race experienced by the claimant group at all stages of their education, I am unable to conclude, based on the record before the court, that the MPT would reinforce, perpetuate or exacerbate that disadvantage.

[99] Ontario argued that it is not discriminatory to require professionals to demonstrate competence in a subject needed to properly perform their jobs, nor is it a disadvantage. Under step two of the s. 15(1) inquiry, that proposition depends on looking at the actual situation of the claimant group and the potential of the law to worsen their situation: *Sharma*, at paras. 52, 196 quoting *Withler v. Canada (Attorney General)*, 2011 SCC 12, [2011] 1 S.C.R. 396, at para. 37.

[100] In this case there was expert evidence from Dr. Reid that high-stakes teacher testing has detrimental effects on racial diversity within the teaching population in the U.S. and the U.K. The EQAO literature review revealed a similar concern. However, the EQAO was cognizant of the potential equity concerns associated with a standardized teacher competency test and proceeded with them in mind. To attempt and redress the potential inequities, all the questions on the MPT were screened for bias and sensitivity to equity issues. This resulted in a

number of substantive adjustments to the content of the test. For instance, the EQAO allowed more external entities to administer the MPT and altered the assessment format from traditional multiple choice to other close-ended questions, such as drag-and-drop and list ordering problems. It also lowered the difficulty level of the test and sourced the math component for the MPT from the question bank used to test students in Grades 3 to 9, rather than the initially agreed upon Grades 3 to 11 difficulty level. The student math question banks had already gone through an initial review factoring in equity issues. Further, teacher candidates who would become teachers of Native Languages only were given an exemption. These substantive changes to the MPT are relevant to a key issue in step two of the s. 15(1) analysis, namely, whether the MPT requirement responds to the actual capacities and needs of racialized teacher candidates: *Taypotat*, at para. 20.

[101] Moreover, the frequent administration of the MPT to allow multiple retakes, coupled with only informing the Registrar when a candidate successfully completes the MPT, takes into account the needs of those candidates who may not pass on a first attempt. It must be borne in mind that the MPT is based on questions drawn from EQAO exams administered to Ontario students in grades 3, 6 and 9. It is Dr. Kajander's uncontradicted expert opinion that the MPT tests mathematical ideas that any individual who has completed a high school level education in Ontario could reasonably be expected to be able to understand. Dr. Kajander's opinion is supported by the fact that over 98% of candidates who attempted the

MPT multiple times in 2021 (including over 98% of racialized candidates who did so) successfully passed the test.<sup>25</sup>

[102] Finally, I note that over the course of 2021, teacher candidates and faculties of education in Ontario were adjusting to the introduction of the MPT by introducing or expanding math instruction within the B. Ed. curriculum. These adjustments can be reasonably expected to improve the mathematical knowledge of teacher candidates in the future, particularly amongst those who may have previously been math-avoidant. It is therefore not unreasonable to expect even higher success rates on the MPT if it were to be administered in future years.

[103] The Divisional Court erred in law by relying on general evidence on standardized testing without regard to the fuller context of the content of the MPT and its administration, as is required at step two of the s. 15(1) inquiry. Had it done so, it would have found insufficient evidence to support a breach of the claimants' s. 15 rights.

## G. **DISPOSITION**

[104] For the reasons set out above, I find that the MPT does not violate s. 15(1) of the *Charter*, and the Divisional Court erred in so finding.

<sup>&</sup>lt;sup>25</sup> 1475 racialized candidates attempted the MPT more than once by December 2021, with 1446 of them succeeding.

[105] I do not find it necessary to consider whether, had I found a violation of s.15, any such violation could have been justified under s. 1 of the *Charter*.

[106] Before concluding, I make one additional observation with respect to the scope of the remedy ordered by the Divisional Court. In addition to declaring the MPT and O. Reg. 271/19 unconstitutional, the Divisional Court found that s. 18(1)(c) of the OCTA was unconstitutional and of no force and effect. The difficulty with that declaration is that s. 18(1)(c) merely authorizes the Registrar of the College to issue a certificate of qualification and registration to candidates who successful complete any prescribed examination relating to proficiency in mathematics. The consequence of declaring this provision of no force and effect was to prevent the government from prescribing any mathematics proficiency examination, regardless of its content. The Divisional Court did not offer any explanation for this aspect of its order, nor do I see any basis in the record upon which it could have been justified. Accordingly, regardless of whether the MPT itself was unconstitutional, the declaration that s. 18(1)(c) was invalid was overbroad.

[107] The Divisional Court order is hereby set aside. With respect to costs, the appellants, although successful on the appeal, do not seek their costs. Accordingly, no costs are ordered.

Released: November 28, 2023

P.J. Moruhan J.A. Jaque Othertz A Dague - Johnsty ja.

# Appendix A



2 Carlton Street, Suite 1200 Toronto ON M5B 2M9 Tel: 1-888-327-7377 Fax: 416-325-0831 Web site: www.eqao.com

#### Math Proficiency Test—2021: Update to Material Referenced in EQAO Affidavit

Analyses are based on the number of applicants who took the MPT in the summer and fall administration periods between May 10 and December 15, 2021.

# Part 1 - Overall success rates and by demographic characteristics

Table 1: Summary of numbers of applicants who took the MPT from May 10 to Dec. 15, 2021 and their success rates<sup>26</sup>

Group	Successful	Successful Not yet Total		Success Rate	
English	7056	369	7425	95%	
French	861	63	924	93%	
All	7917	432	8349	95%	

• English-language MPT test takers have a slightly higher success rate of 95%, compared to a success rate of 93% for French-language MPT test takers.

#### Demographic questionnaire completion

Table 2: Summary of the number of applicants who took the MPT and completion of demographic questionnaire by Language

Completion of Demographic	English-l test t	anguage akers	French-l test t	anguage akers	All		
questionnaire	Number	Percent	Number	Percent	Number	Percent	
All questions	5544	75%	620	67%	6164	74%	
Some questions	280	4%	56	6%	336	4%	
None	1597	22%	245	27%	1842	22%	
Total	7421	100%	921	100%	8342 <sup>2</sup>	100%	

• The majority of MPT test takers (74%) completed the demographic questionnaire, with some variation by language.

<sup>&</sup>lt;sup>26</sup> From May 10 to Dec. 15, 2021, 8,349 individuals wrote the MPT; 1100 of these test takers wrote more than once, and of these, 267 wrote more than twice. This translates to 9,858 unique attempts at the MPT. <sup>2</sup> 7 of 8349 test takers did not access the questionnaire.

## Success rates by demographic variables

Note: In the analyses below, the chi-square test for association was used to test if the association between success rate and each of the demographic variables is statistically significant. This test was performed when all expected counts are greater than 5. When this requirement was not met, only the frequency table is presented, and significance and strength of association are not reported.

		Ag	e Group (Yea	I prefer not to answer		
Outcome		20-24 years	25-29 years	30+ years		Row Total
Guarantal	Count	2375	1885	1345	292	5897
Successful	Column %	97%	96%	93%	92%	96%
Not yet	Count	61	76	106	24	267
Successful Column %		3%	4%	7%	8%	4%
Column Total		2436	1961	1451	316	6164

Table 3: MPT success rates by Age Group:

χ2 = 59.7004 (df= 3, p= < 0.001); Cramer's V= 0.0984

• Success rates differ significantly by age  $\chi^2$  (3, N=6164) = 71.3318, p = < 0.001. Those in the 30+ years age category have a lower success rate (93%) than their younger counterparts.

	the first is become factor by Language openent							
Outcome		English French Eng French Eng Fr		Something other than English or French	Multiple Answers	Row Total		
o ()	Count	4023	486	56	1332	5897		
Successful	Column %	96%	95%	89%	96%	96%		
Not yet	Count	180	28	7	52	267		
Successful	Column %	4%	5%	11%	4%	4%		
Column Tota	al	4203	514	63	1384	6164		

 Table 4: MPT success rates by Language Spoken:

Those who speak languages other than English or French have a lower success rate (89%) than those who speak English, French, or multiple languages.

			Gender Identity								
Outcome		Female	Male	Transgender/ Two-spirit	Cisgender	l prefer not to answer	Row Total				
	Count	3965	1149	397	28	358	5897				
Successful	Column %	96%	97%	98%	100%	92%	96%				
Not yet	Count	186	41	10	0	30	267				
Successful	Column %	4%	3%	2%	0%	8%	4%				
Column Total		4151	1190	407	28	388	6164				

Table 5: MPT success rates by Gender Identity:

• The majority of MPT test takers (67%) identify as Female. Test takers across all gender identity groups performed similarly.

Table 6: MPT success rates by Sexual Orientation:

		Sexual O	rientation	I prefer not to		
Outcome		Heterosexual	Nonheterosexual	answer	Row Total	
Guarantal	Count	3875	997	1025	5897	
Successful Column %	94%	95%	93%	96%		
Not yet	Count	137	54	76	267	
Successful	Column %	6%	5%	7%	4%	
Column Total		4012	1051	1101	6164	

 $\chi^2$  = 27.3524 (*df* = 2, *p* = < 0.0001); Cramer's V= 0.0666

• The majority of MPT test takers identify as heterosexual (65%). There is little variation in success rates across sexual orientation.

#### Table 7: MPT success rates by Race:

		Race										
Outc	ome	Black	East/ Southeast Asian	Indigenous	Latinx	Middle Eastern	South Asian	White	Another race category	Mix	l prefer not to answer	Row Total
	Count	333	356	34	63	172	261	3733	61	227	657	5897
Successful	Column %	90%	96%	72%	94%	93%	93%	97%	91%	97%	93%	96%
Not vet	Count	36	13	13	4	12	21	105	6	7	50	267
Successful	Column %	10%	4%	28%	6%	7%	7%	3%	9%	3%	7%	4%
Colum	n Total	369	369	47	67	184	282	3838	67	234	707	6164

- The majority of the MPT test takers identify as white (62%).
- Those who identify as white or mixed race have the highest success rates (97% each) on the MPT; while those who identify as Indigenous have lower success rates (72%).
- Differences need to be interpreted with caution given small numbers of some groups, for example, Indigenous and Latinx test takers.

Table 8: MPT success rates by Exceptionality:

		Exceptionality									
Out	come	Hearing/ Seeing/ Speech/ Physical	Intellectual/ Developmental/ Learning/ Memory	Addiction/ Mental Health	Pain/Chronic medical condition	Have conditions or disabilities, but not listed here	Multiple	Have conditions or disabilities, but prefer not to specify	No conditions or disabilities	l prefer not to answer	Row Total
Successful	Count	81	126	363	74	675	265	4	2502	1807	5897
Successiui	Column %	94%	95%	97%	99%	99%	94%	100%	93%	98%	96%
Not yet	Count	5	7	11	1	7	16	0	183	37	267
Successful	Column %	6%	5%	3%	1%	1%	6%	0%	7%	2%	4%
Colum	n Total	86	133	374	75	682	281	4	2685	1844	6164

• The majority of MPT test takers either did not have a condition or disability (44%) or preferred not to answer the question regarding an exceptionality or condition (30%).

• There is little variation in the success rate for those who specified an exceptionality, those who did not specify an exceptionality, and those with no condition or disability.

#### Part 2 - Summary for applicants who were unsuccessful and subsequently re-attempted the MPT

	Eng	glish-language t	est takers	;	French-language test take			i	All test takers			
Attempt	Successful	Not yet successful	Total	Success rate	Successful	Not yet successful	Total	Success rate	Successful	Not yet successful	Total	Success rate
1st	6278	1147	7425	85%	670	254	924	73%	6948	1401	8349	83%
2nd	618	267	885	70%	132	83	215	61%	750	350	1100	68%
3rd	113	87	200	57%	37	30	67	55%	150	117	267	56%
4th	31	35	66	47%	17	8	25	68%	48	43	91	53%
5th	9	13	22	41%	2	4	6	33%	11	17	28	39%
6th	4	6	10	40%	3	1	4	75%	7	7	14	50%
7th	2	3	5	40%	0	1	1	0%	2	4	6	33%
8th	1	1	2	50%	0	1	1	0%	1	2	3	33%

Table 9: Summary of numbers of test takers by attempt from May 10 to Dec. 15, 2021 and their success rates

 Of the 8349 test takers who wrote MPT between May 10 and December 15, 2021 (Table 1), 1401 were unsuccessful at their first attempts. Among those 1401, 1100 made second attempts. Of these 1100 retakers, 350 were still unsuccessful. Of these 350 unsuccessful retakers, 267 made third attempts. Overall, 91 test takers took MPT four times or more, while 3 test takers made as many as eight attempts.

• While the overall success rate at the first attempt is 83%, the success rates for second, third, and forth attempt are 68%, 56%, and 53% respectively, showing that achievement on the MPT improves when unsuccessful test takers attempt the test again.

Table 10: Summary of the number of applicants who took the MPT and completion of demographic questionnaire by Language

Completion of Demographic	English-langu	age test takers	French-langu	age test takers	All		
questionnaire	Count	Column %	Count	Column %	Count	Column %	
All questions	449	51%	99	46%	548	50%	
Some questions	32	4%	18	8%	50	5%	
None	403	46%	96	45%	499	45%	
Total	884	100%	213	100%	1097	100%	

• Approximately half of MPT test re-takers completed the demographic questionnaire.<sup>27</sup>

<sup>&</sup>lt;sup>27</sup> Questionnaire completion is associated with the test takers' subsequent test attempt.

# Success rates by demographic variables for MPT re-takers

Note: caution should be exercised in interpreting results below, due to low sample sizes of certain groups. As with the preceding analyses, significance and strength of association are not reported when expected cell counts are less than 5.

		l prefer not					
Outcome		20-24 years	25-29 years	30+ years	to answer	Row Total	
Guadaaful	Count	119	131	176	65	491	
Successful	Column %	94%	90%	88%	84%	90%	
Not yet	Count	7	14	24	12	57	
Successful	Column %	6%	10%	12%	16%	10%	
Column Total		126	145	200	77	548	

Table 11: MPT success rates by Age Group for subsequent test takers

 $\chi^2 = 6.0294$  (*df*= 3, *p*= 0.1102); Cramer's V= 0.1049

• For MPT re-takers, there is no significant association between age and success rates,  $\chi^2$  (3, N = 548) = 6.0294, p = 0.1102.

Table 12: MPT	'success rates	by Language	Spoken for	subsequent test takers
		, , ,	1 )	1

Language Spoken							
Outcome		English	French	Something other than English or French	Multiple Answers	Row Total	
Successful	Count	315	82	11	83	491	
	Column %	90%	90%	69%	92%	90%	
Not yet Successful	Count	36	9	5	7	57	
	Column %	10%	10%	31%	8%	10%	
Column Total		351	91	16	90	548	

• MPT re-takers who speak something other than English or French have a lower success rate (69%) than other language groups.

			Gender	l prefer not	Row			
Outcome		Female	Male	Transgender/ Two-spirit	Cisgender	to answer	Total	
Successful	Count	311	85	22	1	72	491	
	Column %	89%	93%	96%	100%	86%	90%	
Not yet	Count	38	6	1	0	12	57	
Successful	Column %	11%	7%	4%	0%	14%	10%	
Column Total		349	91	23	1	84	548	

#### Table 13: MPT success rates by Gender Identity for subsequent test takers

Table 14: MPT success rates by Sexual Orientation for subsequent test takers

		Sexual C	Drientation	I prefer not to		
Outcome		Heterosexual	Nonheterosexual	answer	Row Total	
	Count	250	102	139	491	
Successful	Column %	93%	87%	86%	90%	
Not yet Successful	Count	20	15	22	57	
	Column %	7%	13%	14%	10%	
Column Total		270	117	161	548	

χ2 = 5.1712 (df= 2, p= 0.0753); Cramer's V= 0.0971

Sexual orientation is not significantly associated with success rate, χ<sup>2</sup> (2, N=548) = 5.1712, p= 0.0753.

# Table 15: MPT success rates by Race for subsequent test takers

			Race									
Outcome		Black	East/Southeast Asian	Indigenous	Latinx	Middle Eastern	South Asian	White	Another race category	Mix	l prefer not to answer	Row Total
Successful	Count	60	22	2	9	17	17	220	6	18	120	491
	Column %	83%	96%	50%	90%	89%	71%	94%	100%	90%	88%	90%
Not vet	Count	12	1	2	1	2	7	13	0	2	17	57
Successful	Column %	17%	4%	50%	10%	11%	29%	6%	0%	10%	12%	10%
Column Total		72	23	4	10	19	24	233	6	20	137	548

Table 16: MPT success rates by Exceptionality for subsequent test takers

		Exceptionality										
Outco	ome	Hearing/ Seeing/ Speech/ Physical	Intellectual/ Developmental/ Learning/ Memory	Addiction/ Mental Health	Pain/Chronic medical condition	Have conditions or disabilities, but not listed here		Multiple	Have conditions or disabilities, but prefer not to specify	No conditions or disabilities	l prefe not to answe	
	Count	3	18	22	6	19		19	2	262	14	
Successful	Column %	100%	95%	92%	100%	100%		83%	100%	86%	95	
Not vet	Count	0	1	2	0	0		4	0	42		
Successful	Column %	0%	5%	8%	0%	0%		17%	0%	14%	55	
Column Total		3	19	24	6	19		23	2	304	14	

# Part 3 - Success Rates for Math and Pedagogy Components

Group	Number of All Test	Overal	l Success	Success	s in Math	Success in Pedagogy		
	Takers	Count	Column %	Count	Column %	Count	Column %	
English	7425	7056	95%	7182	97%	7190	97%	
French	924	861	93%	891	96%	879	95%	
Total	8349	7917	95%	8073	97%	8069	97%	

Table 17: MPT Results by component for all test-takers by language

• Success rates for the math and pedagogy components are highly comparable across language (95%-97%).

• Of note, among the 63 unsuccessful French-language test takers, 76% were unsuccessful on the pedagogy component of the test.