

Math PAT Changes Are Regressive and Counterproductive

Jonathan Teghtmeyer

When I was in the classroom, I taught mostly high school mathematics. I see great importance in mental mathematics, including the ability to easily recall math facts. Without these fundamental skills, students will continue to struggle in future years.

However, the biggest challenge I experienced in teaching mathematics was trying to overcome the deeply entrenched math phobia that affected so many students.

Consequently, I was very disappointed to learn that Alberta Education is introducing a 15-question, timed, no-calculator number section to the Grade 6 provincial achievement test (PAT).

Now, I should note that ministry officials are quick to argue that this new part A is not timed because teachers are provided the opportunity to extend the 15 minutes allocated to it. But I'm not convinced. Extra time allowed for part A comes from any extra time allowed for part B and is limited to a combined total of 30 minutes. Students who struggle on part A will be left with limited time to complete part B, and they will be rushed by the sight of students who have handed in part A and received their calculator to start on part B.

This undoubtedly will create higher stress for many students when it is neither helpful nor necessary. It simply exacerbates the test and math anxiety that exists for far too many students. A pressure test of basic number facts like this is regressive and counterproductive toward achieving the goal of ensuring that students have strong mental math and numeracy skills.

The department is fully aware of how these testing changes will reverse engineer instructional practice in schools—frankly, it's their intent. But I'm worried it will drive bad practices in schools, like the widespread reintroduction of "mad minutes," which do nothing to challenge strong students while simultaneously doing nothing to help the students who need it the most.

Some will confuse my concern with a desire to remove rigour or stress from education. Nothing could be further from the truth. I prefer authentic rigour and authentic stress that actually equip students with skills to endure and manage stress healthily.

Authentic stress is created by presenting students with problems and challenges where it's not immediately clear how to get the answer. Teachers ensure that the students have the knowledge, skills and resources required to get the answer but also let them struggle with how to get to it. This struggle and stress is actually quite healthy because students build confidence through discovering they have the skills and capacity to succeed. For students who don't have the required skills, forcing them to sit through a manufactured stress test only teaches them helplessness and reinforces any self-perception of failure.

But my biggest concern is how this testing change was made as a knee-jerk concession to back-to-basics crusaders who have manufactured a math crisis out of a moderate 6 per cent decline over 12 years in Programme for International Student Assessment (PISA) scores—a decline that still leaves Alberta tied for the tenth-best jurisdiction in the world. These vocal crusaders want Alberta to be more like the countries overtaking us, countries where rigid, regimental drill-and-kill instruction is combined with ridiculous amounts of after-school boot-camp-style tutoring.

If this perspective is winning the ear of Alberta Education on testing, then it will prove quite problematic as we enter new curriculum design. Our new curriculum should aim to achieve an Alberta-made vision of public education instead of trying to meet the goals established by an international economic cabal like the Organisation for Economic Co-operation and Development (OECD) (which administers the PISA tests). Our curriculum should strive to educate students for 2030, not 1950.

Then again, perhaps I'm overreacting. Minor tweaks to PATs will become irrelevant once the tests have been eliminated, as promised.

I welcome your comments—contact me at jonathan.teghtmeyer@ata.ab.ca.

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