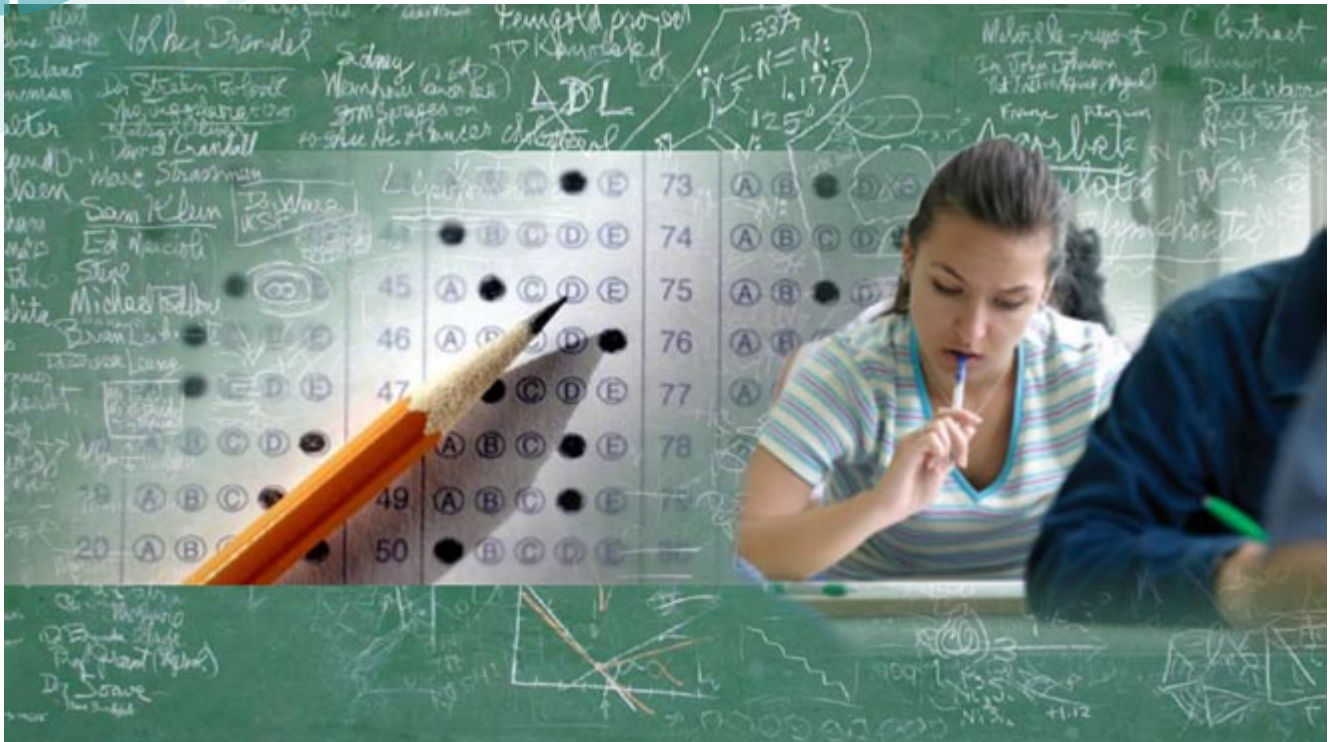


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## Standardized Testing is a Good Thing

By Michael Zwaagstra

## About the author



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Note to reader: Some words in this document may appear in blue and are underlined.  
Clicking on these words will direct the reader to relevant sites or documents using your associated web-browser.

## Executive summary

- Standardized testing makes it possible to compare schools with each other, and it provides a way to identify successful schools as well as those in need of assistance.
- For a test to be standardized, experts must create it. In addition, all students write the test at a set time, and specially trained teachers who follow established protocols do the marking.
- All provinces, except Manitoba, require students to write standardized tests at a variety of grade levels.
- With the exception of Manitoba, all provinces make academic achievement data available to the public.
- Despite the many benefits of standardized testing, it has come under attack. Teachers' unions provide the strongest opposition.
- A balanced assessment policy includes both teacher-created assessment and standardized testing. Teacher-created assessment ensures that teachers can consider individual student needs. Standardized testing balances this with an objective measurement tool to determine if the students are meeting provincial curriculum standards.

The evidence is clear that standardized testing is an important component of a balanced approach to student assessment. Without the information provided by standardized tests, it becomes virtually impossible to identify how well students are doing.

***All provinces, except Manitoba, require students to write standardized tests at a variety of grade levels.***

## Introduction

As with healthcare, public education consumes a large percentage of provincial budgets. The economic challenges facing most provincial governments mean they must make difficult funding choices between health and education in the years ahead.

As a result, it becomes even more important for school administrators to be able to demonstrate solid results to the public. Concrete gains in student achievement prove the effectiveness of the school system and make it more likely public education will receive the support it needs.

Standardized testing is the most accurate and objective means by which student academic achievement can be reported to the public. Such testing makes it possible to compare schools with each other, and it provides a way to identify the most successful schools as well as the less successful ones. A comprehensive, standardized testing regime, coupled with well-designed tests created by classroom teachers, provides for a balanced approach to student assessment.

Unfortunately, some provinces have moved away from standardized testing, and this makes it much more difficult to evaluate student achievement objectively. Without a way to track student achievement or compare results from previous years, provincial officials cannot determine the effectiveness of schools. This makes it difficult for politicians to justify the substantial funding that public education requires. Without this justification, resources can be diverted to other sectors such as health care, where standardized assessments can justify expenditures.

Thus, it is essential for student achievement to be measured accurately and for these results to be made available to the public. This cannot be done without standardized testing.

***Standardized testing is the most accurate and objective means by which student academic achievement can be reported to the public.***

# What makes a test standardized?

Most tests students write during the regular school year are not standardized. Tests created by classroom teachers form an important component of assessment, but they obviously vary from school to school and even within a school. At present, it is almost impossible to compare results from teacher to teacher or from school to school.

For a test to be standardized, experts at the divisional, provincial, national or international level must create it. In addition, all students must write the test at a set time, and specially trained teachers who follow specific protocols must mark the papers at a central location.<sup>1</sup> Thus, two students who possess equal knowledge of the subject matter being tested should receive similar results regardless of where they go to school.

Some standardized tests are primarily skills-based. For example, the Organisation for Economic Co-operation and Development's Programme for International Student Assessment (PISA) is administered every three years to random samples of fifteen-year-old students from more than 50 countries.

It broadly assesses reading, mathematics and scientific literacy, and it is not directly correlated with any particular curriculum.<sup>2</sup> Despite its limitations, the PISA results provide valuable information about the relative academic performance of students in these countries.

Standardized tests created by provincial education departments and administered to all provincial schools are most often curriculum-based, which means they reflect the content of the provincial curriculum. Because education falls exclusively under provincial jurisdiction in Canada, there is no federal department of education. Consequently, each province sets its curriculum, although the provinces sometimes work together in setting a common curriculum.<sup>3</sup>

***...there is no federal department of education.***

***Consequently, each province sets its curriculum...***

# Standardized testing – provincial comparisons

There is significant variation in standardized testing across Canada. No two provinces have identical testing procedures in place. Nevertheless, when examined more closely, a number of common themes emerge.

## British Columbia

Every year, Grades 4 and 7 students write the Foundation Skills Assessment, which evaluates reading comprehension, numeracy and writing skills. The Ministry of Education receives this information and makes it available to the public. The students' individual results do not count toward their final grades.<sup>4</sup> At the high school level, Grades 10, 11 and 12 students write provincial examinations in various subjects. In Grades 10 and 11, these exams make up 20 per cent of their final grades, and the value increases to 40 per cent in Grade 12.<sup>5</sup>

## Alberta

Grade 3 students write Provincial Achievement Tests in English language arts and mathematics while Grades 6 and 9 students write these tests in four core subjects, English language arts, mathematics, science and social studies. These tests do not count toward the students' final marks, but the school results are available to the public. Grade 12 students write Diploma Examinations in math, science, English language arts and science, which make up 50 per cent of their final mark in each subject.<sup>6</sup>

## Saskatchewan

Students write provincial standardized assessments in mathematics, science, reading and writing on a two-year cycle.

Mathematics	Grades 5, 8 & 10 in 2011, 2013, 2015 ...
Reading	Grades 4, 7 & 10 in 2011, 2013, 2015 ...
Science	Grades 7 & 10 in 2012, 2014, 2016 ...
Writing	Grades 5, 8 & 11 in 2010, 2012, 2014. <sup>7</sup>

The results do not count towards students' final marks, but the data are available to the public upon request.

## Manitoba

Grade 12 students write provincial standardized tests in English language arts and mathematics, which count for 30 per cent of their final marks. Teachers also complete provincially directed rubrics in the areas of reading, writing, mathematics and student engagement for Grades 3, 7 and 8. Although the reporting template is standardized, the instruments used by teachers for assessment are not.<sup>8</sup> Thus, the only true standardized tests in Manitoba are those completed in Grade 12, but teachers at the school or the division level mark them. Results from these assessments are sent to the Department of Education, but they are not available to the public.<sup>9</sup>

## Ontario

The Education Quality and Accountability Office (EQAO) administers standardized reading, writing and mathematics assessments to Grades 3 and 6. In addition, it assesses Grade 9 students in mathematics and Grade 10 students in literacy. The EQAO Web site lists the results, and school comparisons are readily available.<sup>10</sup>

## Quebec

Students in Grades 4 and 6 write compulsory standardized examinations in reading, writing and mathematics, and these exams make up 20 per cent of their final marks. Grade 11 students write standardized exams in science, English/French language arts and history, and these make up 50 per cent of their final marks. School results are available on the ministry's website.<sup>11</sup>

## New Brunswick

All students in Grades 2, 4, 7 and 9 write standardized exams in reading and writing. Students who are unsuccessful in the Grade 9 assessment must take it again in Grade 11 or 12 because it is a graduation requirement. Grade 6 students write a standardized science test, and students in Grades 3, 5 and 8 write mathematics tests. The test results are available to the public.<sup>12</sup>

## Nova Scotia

Students in Grades 3 and 6 write provincially mandated tests in literacy and mathematics, and the Grade 9 students write an additional literacy test. These results do not count toward their final grades. All Grade 12 students write standardized exams in mathematics and language arts, and these tests are worth 30 per cent of their final marks. A number of Grade 12 elective courses also have mandatory standardized examinations. All test results are available to the public.<sup>13</sup>

## Prince Edward Island

Students write standardized assessments in reading and writing in Grades 3 and 6 and mathematics assessments in Grades 3 and 9. Results for individual schools are available on the department's website.<sup>14</sup>

## Newfoundland and Labrador

All students in Grades 3, 6 and 9 write standardized tests in language arts and mathematics. In addition, Grade 12 students write standardized exams in biology, chemistry, English, French, mathematics, physics, world geography and world history. These exams count for 50 per cent of students' final marks. Results are available to the public upon request.<sup>15</sup>

## Summary

Standardized testing is a common practice across Canada. With the exception of Manitoba, all provinces require students to write standardized tests at a number of grade levels. Grades 3, 6, 9 and 12 are the most common grades for standardized testing to take place. Mathematics and English language are the primary focus of most standardized tests.

Grade 12 examinations normally consist of between 30 per cent and 50 per cent of students' final marks. In most provinces, standardized tests in other grades do not count toward students' final marks.

With the exception of Manitoba, all provinces make academic achievement data available to the public. Manitoba's refusal to release any student performance data for individual schools or school divisions stands in stark contrast to the practice of every other province.



# The importance of standardized testing

Simply put, standardized testing is an essential component of public education because it provides teachers, parents and the public with important information about student academic performance. Without the data provided by standardized tests, policy-makers are operating in the dark when trying to determine where improvement and additional funding are needed. Even educators who have been critical of standardized tests often recognize the inherent value of the data provided by these tests.

As well, large-scale testing can reveal important patterns in levels of achievement that warrant greater attention. It can show just how big the gap is between the best- and worst-achieving students so that the need to improve equity in outcomes is made more evident. There is no guarantee that test results will be used for this purpose, and they certainly can be and have been misused, but they can provide means of looking at system-wide achievement that could be valuable.<sup>16</sup>

As such, a balanced assessment policy includes both teacher-created and standardized tests. Teacher-created assessment ensures that teachers take individual student needs and interests into account, while standardized tests balance those needs and interests with an objective measurement tool that makes it possible to determine if the provincial curriculum standards are being met.

This is not dissimilar to what happens in other professions. An optometrist, for example, evaluates the eyesight of patients using both professional judgment and standardized instruments, such as a standardized eye chart. What would happen if optometrists decided to stop using a standardized eye chart and simply invented their own? The answer is obvious. The accuracy of eye exams would decline.

In fact, many research studies demonstrate the benefits of standardized testing on student achievement.<sup>17/18</sup> In one of these studies, Ludger Woessmann, a professor at the University of Munich, examined data from the 39 countries that participated in the Third International Mathematics and Science Study. He found that students in countries with centralized, standardized examination systems outperformed students in countries without these tools.<sup>19</sup> Although this finding alone is insufficient to prove direct causation, it does undermine the argument made by teachers' unions that standardized testing has a negative impact on student learning.

***Even educators who have been critical of standardized tests often recognize the inherent value of the data provided by these tests.***

# The war on standardized testing

Despite the many benefits of standardized testing, it has come under attack. In fact, teachers' unions have consistently provided the strongest opposition to standardized testing. Three recent examples illustrate this point.

The British Columbia Teachers' Federation (BCTF) stridently opposes the Foundation Skills Assessment (FSA) written by Grades 4 and 7 students, arguing that these tests undermine teachers' autonomy, take away from more-valuable learning opportunities and produce data that can be used to rank schools unfairly.<sup>20</sup>

Various locals of the BCTF recently took their protest to new levels by sending letters to the parents of Grades 4 and 7 students urging them to exempt their children from the FSA.<sup>21</sup> The BCTF also has an anti-FSA brochure for parents on its Web site and includes a form letter<sup>22</sup> that parents can use to exempt their children from the FSA.<sup>23</sup>

The Manitoba Teachers' Society (MTS) has long been opposed to any standardized testing. Prior to 1999, the provincial government had established standardized tests for Grades 3, 6, 9 and 12 students in language arts and mathematics. MTS opposed these tests and advocated for their abolition. Upon the election of a sympathetic NDP government in 1999, the Grade 3 tests were abolished and the Grades 6 and 9 tests became optional.<sup>24</sup>

***The Manitoba Teachers' Society (MTS) has long been opposed to any standardized testing.***

Later, the Grades 6 and 9 tests were scrapped and replaced with checklists to be filled out by the Grades 7 and 8 teachers. Only the Grade 12 English language arts and mathematics exams remain in place, but these exams are not marked centrally, and this ensures that Manitoba has the weakest standardized testing program in the country.<sup>25</sup>

Not surprisingly, MTS is quite pleased with these changes and considers itself largely responsible for dismantling standardized testing in Manitoba.<sup>26</sup>

The standardized tests administered in Ontario have come under fire from teachers' unions. For example, last year, the Elementary Teachers' Federation of Ontario (ETFO) called for a two-year moratorium on the standardized numeracy and literacy tests administered to students in Grades 3 and 6. However, the government rejected their request and resolved to continue testing students in these grades.<sup>27</sup>

The arguments used by the ETFO against the tests are similar to those used by teachers' unions in other provinces. They argue that the tests detract from more-meaningful learning, are too expensive and the data from these tests is used to make unfair comparisons between schools.<sup>28</sup>

More recently still, the newly-minted leader of the Alberta Progressive Conservative Party and now premier of the province, Alison Redford, pledged during the leadership race to scrap standardized testing for grades 3 and 6—possibly in exchange for voting support from the Alberta Teachers Association (ATA).<sup>29</sup>

# Responding to the anti-testing arguments

Obviously, teachers' unions and other opponents of standardized testing think they have good reasons for opposing standardized testing. However, when their arguments are examined, they do not stand up to scrutiny. Here are some of the most common arguments and the responses to them.

- 1) Standardized tests cause teachers to teach to the test, and they take away from more-worthy curricular activities.<sup>30</sup>

Properly designed standardized tests mirror the provincial curriculum. As long as teachers are following the curriculum, they are already "teaching to the test."

Standardized tests assess whether teachers have taught the curriculum and whether the students have learned it. Teachers who are not teaching to the test are probably not following the curriculum. If this is the case, school administrators need to correct this problem.

- 2) Standardized tests undermine the professional autonomy of teachers.<sup>31</sup>

In virtually every profession, standardized instruments and procedures are mandated, and professionals are expected to use them correctly. Optometrists use standardized eye charts, police officers use standardized breathalyzers and nurses use standardized blood-pressure instruments. Not surprisingly, none of these professionals think that using standardized instruments threatens their autonomy.

Thus, rather than undermining the professional autonomy of teachers, standardized tests and procedures actually enhance it. In fact, teachers can use these objective instruments to demonstrate that they are fulfilling their professional responsibilities. Specifically, the instruments can show that teachers are teaching the curriculum and their students are learning it.

- 3) Standardized tests are expensive, and the money could be better spent on other areas.<sup>32</sup>

Since teachers' unions strongly oppose the use of standardized tests, it is not surprising that they think the tests cost too much. In their view, any money spent on standardized testing is too much!

However, they go further when they claim that the money spent on standardized testing affects the quality of education because it takes money from more-worthy areas. For example, the ETFO has made the cost of standardized testing one of their main reasons for opposing it. However, the budget of the EQAO, which designs and administers the standardized tests in the province, is about \$33-million each year.<sup>33</sup> The government of Ontario will likely spend \$23.2-billion on public education in 2011.<sup>34</sup> Thus, standardized testing makes up about 0.14 per cent of the education budget in the province.

It hardly seems unreasonable for the government to spend 0.14 per cent of the total education budget on tests that provide valuable information about student performance in the 4,935 public

and Roman Catholic schools in the province.<sup>35</sup>

- 4) Standardized tests cause students to suffer significant stress, harming their self-esteem.<sup>36</sup>

This argument ignores the fact that stress is not always harmful. In fact, there is nothing wrong with students feeling a moderate amount of anxiety prior to taking a test. Similar to life in general, a test provides a challenge, and challenges can cause stress. For virtually all students, a moderate level of anxiety can be a powerful motivator for careful preparation, for reviewing material and for practicing and improving skills. It also helps students to focus their attention on the most important material.

Any student who plays competitive sports or who participates in music festivals experiences considerable stress prior to a game or a performance. If teachers' unions were consistent, they would call for an end to all these "high-stakes" competitions.

- 5) Standardized tests do not improve academic achievement. This is shown by the fact that countries with no standardized tests, such as Finland, rank very high on the PISA tests while countries such as the United States rank much lower despite their heavy reliance on standardized testing.<sup>37</sup>

Although Finland does not have standardized testing in the lower grades, it does have a rigorous national curriculum with standardized tests at the completion of high school.<sup>38</sup> For the last three (optional) years of high school, Finland streams students, based on marks, into either an academic or a vocational program. In addition, Finland has a much more culturally homogenous population than the United States, and gaps between the rich and poor are much less pronounced.<sup>39</sup>

Unions that simplistically compare these two countries often ignore these differences.

Additionally, this argument is predicated on accepting the validity of standardized testing. Specifically, opponents of standardized testing cannot simultaneously argue that standardized tests have validity and do not have validity.

If standardized tests do not accurately measure the academic achievement of students, then they cannot argue that the tests have validity. It is more than a little ironic for opponents of standardized testing to argue against using test results to compare schools within the same province and yet freely use them to compare the education systems of entire countries from different parts of the world.

In this respect, it is misleading to say that an overreliance on standardized testing is responsible for the relatively low PISA results for students in the United States. The results are reported by race/ ethnicity, and they show that white students in the United States perform at approximately the same level as Canadian students and that Asian-American students outperform Canadian students. Black and Hispanic students, however, significantly underperform other students in the United States.<sup>40/41</sup>

This evidence illustrates that there are many factors at play in comparing the performances of students in one country with students in another country on tests such as PISA. The evidence, in fact, does not support the simplistic notion that standardized testing is responsible for the lower results in the United States in comparison with Canada or Finland.

Another factor to consider is that the PISA data show that Alberta, the Canadian province with the most standardized testing, consistently outperforms other provinces. In fact, the two provinces with the least amount of standardized testing, Manitoba and Prince Edward Island, have the worst results in the country.<sup>42</sup> This evidence certainly runs counter to the claim that standardized testing leads to lower academic achievement among Canadian students.

- 6) Think-tanks use standardized tests to make unfair and misleading comparisons between schools and provinces.<sup>43</sup>

Teachers' unions have a right to disagree with the ways think-tanks make use of the results of standardized tests, but that is not a sufficient reason to prevent parents and the public in general from having the data. Because some organizations might misuse data is not a good reason to stop releasing information to the public. For example, some groups habitually misuse data published by the Department of Finance, but that does not mean such data should not become public.

***...the two provinces with the least amount of standardized testing, Manitoba and Prince Edward Island, have the worst results in the country.***

## Conclusion

Clearly, standardized testing is an important component of a balanced approach to student assessment. Without the information provided by standardized tests, it becomes virtually impossible to identify how well students are doing. Thus, provincial governments should resist pressure from teachers' unions to abolish standardized testing. Accurate information about student performance remains essential to providing the best education possible.

In addition, provincial governments should co-operate as much as possible in the design and administration of standardized tests. Considering the significant amount of family mobility in Canada, it makes sense to harmonize the tests and the curricula they are based upon to the greatest degree possible. Moving toward having the tests administered at the same grade levels (e.g., grades 3, 6, 9 and 12) and in the same subjects would be a positive step forward.

International comparisons of standardized tests such as PISA provide a lot of valuable information although their usefulness is limited due to the many differences between countries. In contrast, comparisons within and between provinces have fewer of these differences and have greater validity. Thus, it makes sense to have a fully developed standardized testing program in each province and to have the results available to the public.

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43. British Columbia Teachers' Federation, What Really Counts: Rethinking Accountability. Available at <http://bctf.ca/uploadedFiles/Education/Accountability/FSA.pdf>.

## Further Reading

September 2011

### **Math Instruction that makes sense**

Michael Zwaagstra

<http://www.fcpp.org/publication.php/3906>

June 2011

### **Selecting Good Teachers for Your Children**

Rodney Clifton

<http://www.fcpp.org/publication.php/3806>

March 2011

### **1st Annual Report Card on Western Canadian High Schools**

David Seymour

<http://www.fcpp.org/publication.php/3678>

For more see

[www.fcpp.org](http://www.fcpp.org)

