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E-BRIEF

September 16, 2015

EDUCATION, SKILLS AND LABOUR MARKET POLICY

Underperforming Adults? The Paradox of Skills Development in Canada

by
Andrew Parkin

- Canada's average or, in some cases, below-average performance in the OECD's latest survey of adult skills (known as the Programme for the International Assessment of Adult Competencies (PIAAC)) sparked some observers to call the quality of Canada's education systems into question. The reason: the results appeared to contradict the prevailing notion that our education systems are among the best in the world.
- Closer analysis of the survey results, however, reveals the unique ways in which Canada's skills profile is shaped not only by the experiences of those born and educated in the country but also by those of its sizable immigrant population.
- This paper highlights the full extent to which Canada's education and immigration systems interact in developing the country's human capital. It points to the importance of properly targeting interventions to improve skills proficiency, and of post-immigration programs to support the language skills and cultural capital that are also key to successful integration into the labour market.

Canadians have become accustomed to hearing that their provincially run education systems are among the best in the world. For 15 years, they have heard so in reports from the Programme for International Student Assessment (PISA), published by the Organisation for Co-operation and Development (OECD). Canada also remains the best-educated country in the OECD, measured in

The author thanks several anonymous reviewers and Colin Busby, Senior Policy Analyst at the C.D. Howe Institute, for comments on earlier version of this E-Brief. The author retains responsibility for any errors and the views expressed here.

terms of the proportion of its population that has graduated from college or university. Against this backdrop of success, Canada's lacklustre adult literacy and numeracy scores are puzzling.

High achievement in education should translate into high performance on skills tests for adults. Yet the results of another major OECD survey, the Programme for the International Assessment of Adult Competencies (PIAAC), released in October 2013, placed Canada in the middle of the pack, measured by the performance of adults in literacy, numeracy, and problem solving on computers.

This puzzle naturally leads to the suggestion that the education systems in Canada are not nearly as good as we have been led to believe. This was the tack taken by John Manley, head of the Canadian Council of Chief Executives, who in expressing his disappointment with the PIAAC results remarked that "it's time to stop congratulating ourselves on the quality of our primary, secondary and post-secondary education systems."[1] Manley was not alone. The Conference Board of Canada's Michael Bloom (2013) cited the "mediocre" performance of Canada's postsecondary graduates in PIAAC as one reason why "the whole postsecondary system needs to be thoroughly examined as never before."

Even the economists at the OECD pointed the finger at the failure of Canada's schools, colleges and universities to transfer the education advantage among teenagers into a skills advantage in the workforce. Juxtapositioning the PISA and PIAAC results prompted them to conclude "that Canadian upper secondary and post-secondary education (PSE) contribute less to literacy and numeracy skills development than in most other countries" (OECD 2014, 114).

A closer look at the PIAAC results, however, highlights the extent to which Canada's skills profile is shaped not only by the experiences of those born and educated in this country but also by those of its sizeable immigrant population – one of the largest and most highly skilled in the industrialized world. Most observers will not be surprised to learn that Canadian immigrants perform much better than immigrants in most other countries. What may surprise them, however, is that the results of non-immigrants in Canada are also above average. Herein lies the paradox that this paper will explore: Canada places above the international average when the literacy scores of its immigrant and non-immigrant populations are considered separately, but falls to only average when the scores of both groups are combined.

Exploring this paradox leads to a better understanding of the PIAAC results, and to more informed public policy responses – ones that are more likely to hit the mark by assisting those who in fact face the biggest skills deficits. Governments in Canada should strive to improve skills proficiency as a matter of course, given the strong positive correlation between proficiency and both labour market outcomes and social well-being (OECD 2013). Interventions, however, should be appropriately targeted. In the first instance, we should worry less about our recent graduates and focus our efforts on boosting the foundational skills of groups such as older workers, immigrants, Aboriginal peoples, those with lower levels of educational attainment and those facing language barriers.

1 Notes for remarks by The Honourable John Manley, President and Chief Executive Officer Canadian Council of Chief Executive, to the Canadian Club of Toronto, November 28, 2013; accessed at http://www.ceocouncil.ca/wp-content/uploads/2013/12/John-Manley-Remarks-to-the-Canadian-Club-of-Toronto-Nov-28-2013-UPDATED-6DEC2013.pdf. Manley was also commenting on the decline of Canada's PISA math scores.

More specifically, Canada must continue to improve its efforts to attract highly skilled and educated immigrants while at the same time addressing important policy challenges relating to immigrant settlement and post-immigration programs to support the language skills and cultural capital of new arrivals.

Canada's PIAAC Results

In October 2013, the OECD released the results of PIAAC, which measured the performance of adults in literacy, numeracy, and problem solving on computers in 23 countries, including Canada (OECD 2103).[2]

Canada's overall performance across the domains covered by the study was best characterized as average. Canada placed slightly higher than the international average in terms of "problem solving in technology rich environments," but placed at the international average in literacy, and below average in numeracy (see Table 1).[3]

While the results for Canada were not unequivocally bad (and in the case of computer skills, were rather positive), they seemed disappointing given Canada's typically high rankings in assessments of high-school students (such as PISA) and top ranking in terms of educational attainment, which might reasonably be expected to translate into high performance on skills tests for adults.

Even more puzzling, given the reputation of Canada's education systems, is that a breakdown of results by education level shows Canada lagging in each group (see Table 2 – note that, in the interest of both space and clarity, the PIAAC results shown in Table 2 and subsequent tables focus on literacy scores and omit scores for numeracy and problem solving; however, the broad patterns highlighted in this report hold across all three domains). This prompts a simple question: if Canada has a high-performing education system, why do its graduates not out-perform the international norm? The answer is the unique composition of Canada's adult population and labour force relative to other OECD countries.

The Paradox Unpacked

Canada has one of the most diverse populations in the OECD; among countries participating in the PIAAC study, Canada has the second-highest proportion of adults (aged 16 to 65) who are foreign born, and the highest who are foreign born and whose first language is different from the language of the assessment (see Figure 1). Taking individual provinces into account, British Columbia and Ontario stand out as having the highest proportion of both immigrants and immigrants with a foreign language in the PIAAC study.[4]

2 Cyprus also participated in the PIAAC study, bringing the original number of countries to 24; however, Cyprus's data were subsequently excluded. Only certain regions took part in Belgium (Flanders) and the UK (England and Northern Ireland). In Canada, all 13 provinces and territories took part; results are available for both Canada as a whole and for each province and territory separately. Nine additional countries are taking part in a later round of the study, due to be completed in 2016. See: http://www.oecd.org/site/piaac/surveyofadultskills.htm.

3 Canada's results for PIAAC are available in various materials prepared by the Council of Ministers of Education, Canada (CMEC) and available at www.piaac.ca.

4 Leaving the focus on immigrants aside, it is interesting to note that Nunavut leads all jurisdictions in the PIAAC study in terms of the number of respondents (whether immigrants or not) whose first language is not the language of the assessment.

Table 1: PIAAC Results (International)

Jurisdiction	Literacy – Avg. Score	Jurisdiction	Numeracy – Avg. Score	Jurisdiction	Problem Solving – Achieved Levels 2 & 3* *(percent)*	Jurisdiction	Completed CBA** *(percent)*
Japan	296	Japan	288	Sweden	44	Sweden	88.0
Finland	288	Finland	282	Finland	42	Netherlands	86.6
Netherlands	284	Flanders (Bel.)	280	Netherlands	42	Denmark	85.9
Australia	280	Netherlands	280	Norway	41	Norway	84.2
Sweden	279	Sweden	279	Denmark	39	England & N. Ire.	83.8
Norway	278	Norway	278	Australia	38	Finland	81.6
Estonia	276	Denmark	278	Canada	37	Canada	81.4
Flanders (Bel.)	275	Slovak Rep.	276	Germany	36	Germany	80.8
Russian Fed.	275	Czech Rep.	276	England & N.Ire.	35	United States	80.0
Czech Rep.	274	Austria	275	Japan	35	Flanders (Bel.)	79.2
Slovak Rep.	274	Estonia	273	Flanders (Bel.)	35	Australia	76.0
Canada	273	Germany	272	OECD Avg.	34	OECD Avg.	75.7
OECD Ave	273	Russian Fed.	270	Czech Rep.	33	Czech Rep.	74.8
Rep. of Korea	273	OECD Avg.	269	Austria	32	Austria	73.2
England & N. Ire.	272	Australia	268	United States	31	Estonia	70.4
Denmark	271	Canada	265	Rep. of Korea	30	Rep. of Korea	70.0
Germany	270	Rep. of Korea	263	Estonia	28	Ireland	67.3
United States	270	England & N. Ire.	262	Russian Fed.	26	Russian Fed.	66.4

* The full name of this domain is "problem solving in technology rich environments" (or "PS-TRE"). Levels 2 and 3 are the highest of the three levels of competency in this domain.
** CBA = computer-based assessment.
(Note that not all respondents participating in the study had the basic computer skills needed to complete the computer-based assessment; these respondents completed a paper-based literacy and numeracy test but were necessarily excluded from the assessment of computer-based problem solving. PIAAC accordingly generates four main results and not three – in addition to the scores in each of the three domains (literacy, numeracy and problem solving in technology rich environments), there is also the proportion of adults able to complete the computer-based assessment. Because the assessment of problem solving (PS-TRE) excluded respondents with very low computer skills, it is not possible to generate meaningful average scores; instead, results are reported in terms of the distribution of respondents across different levels of proficiency.)

Source: Author's calculations using the PIAAC international data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac/.

Table 1: Continued

Jurisdiction	Literacy – Avg. Score	Jurisdiction	Numeracy – Avg. Score	Jurisdiction	Problem Solving – Achieved Levels 2 & 3* *(percent)*	Jurisdiction	Completed CBA** *(percent)*
Austria	269	Poland	260	Slovak Rep.	26	Slovak Rep.	63.6
Poland	267	Ireland	256	Ireland	25	Japan	61.9
Ireland	267	France	254	Poland	19	Poland	50.2
France	262	United States	253	France	n.a.	France	n.a.
Spain	252	Italy	247	Italy	n.a.	Italy	n.a.
Italy	250	Spain	246	Spain	n.a.	Spain	n.a.

* The full name of this domain is "problem solving in technology rich environments" (or "PS-TRE"). Levels 2 and 3 are the highest of the three levels of competency in this domain.
** CBA = computer based assessment.
(Note that not all respondents participating in the study had the basic computer skills needed to complete the computer based assessment; these respondents completed a paper-based literacy and numeracy test but were necessarily excluded from the assessment of computer-based problem solving. PIAAC accordingly generates four main results and not three – in addition to the scores in each of the three domains (literacy, numeracy and problem solving in technology rich environments), there is also the proportion of adults able to complete the computer-based assessment. Because the assessment of problem solving (PS-TRE) excluded respondents with very low computer skills, it is not possible to generate meaningful average scores; instead, results are reported in terms of the distribution of respondents across different levels of proficiency.)

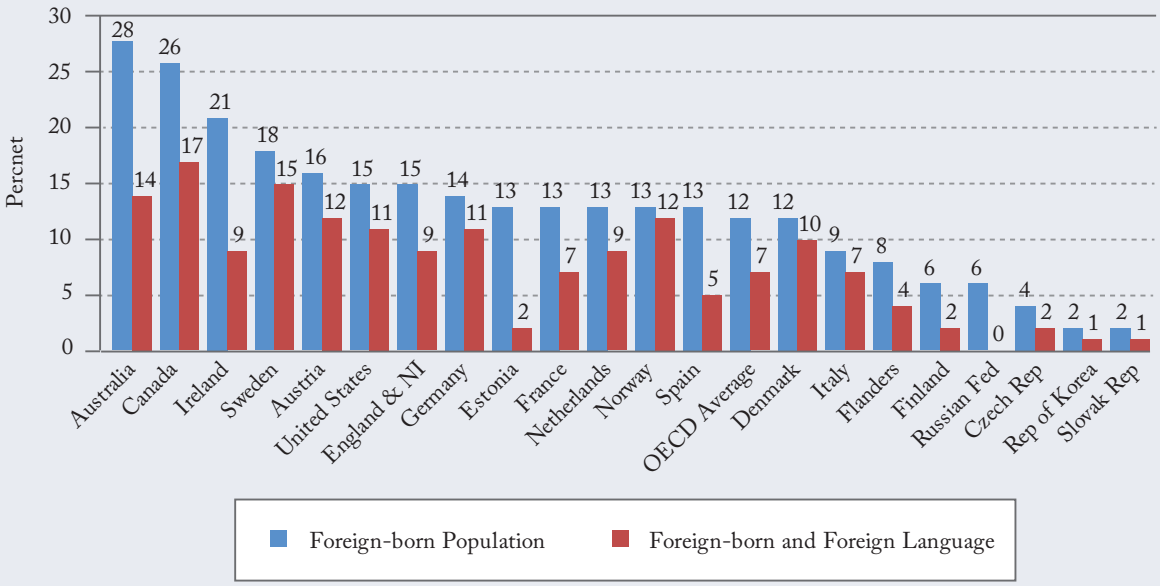
Source: Author's calculations using the PIAAC international data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac/.

Table 2: PIAAC Literacy Scores for Adults (Age 16-65) by Education Level

	Below High School	High School	College	University
Canada	234	267	276	300
OECD Average	246	271	284	302

Source: CMEC and author's calculations; see http://www.conferenceboard.ca/Libraries/CONF_PRES_PUBLIC/13-0067_presentation_Andrew_2.sflb and see http://www.piaac.ca/docs/PIAAC2013/web_deck_of_findings.EN.pdf.

Figure 1: Immigrants as a Proportion of the Adult Population, PIAAC



Source: Author's calculations using the PIAAC data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac/.

Canada's immigrant population is not only one of the largest, it is also one of the most successful (see Table 3). Literacy scores for immigrants in Canada are above the OECD average, and while all countries show a gap in PIAAC scores between immigrants and non-immigrants, the gap is lower than average in Canada (OECD 2013, 126). Several of the countries also reporting good results for immigrants, such as the Czech and Slovak Republics, also have immigrant populations that are much smaller, proportionately, than Canada's. Others, such as Ireland and Estonia, have sizeable but much less diverse immigrant populations. Taking these different factors into account, Canada is really outperformed in this area only by Australia.[5]

While the results for Canada's immigrant population are reassuring, so too are those for non-immigrants – a fact that is often overlooked. A re-ordering of Table 3, ranking countries according to the scores for non-

5 Even compared with Australia, Canada's immigrant population is more diverse (see, for instance, the figures in Figure 1 on the proportion of the population who are foreign born and whose first language is different from the language of the assessment). Immigrants to Australia are twice as likely to originate from the Anglophone countries of UK, the US or New Zealand as are immigrants to Canada; but despite Australia's geographic proximity to Asia, its immigrants are less likely to originate from major Asian source countries such as China, India and the Philippines than are immigrants to Canada. See, for example, the statistics reported by the Migration Policy Institute at: http://www.migrationpolicy.org/programs/data-hub/top-sending-countries-immigrants-australia-canada-and-united-states.

Table 3: PIAAC Results by Immigrant Status (International)

Jurisdiction	Proportion of Immigrants in the PIAAC Sample *(Percent)*	Literacy Score *(Average)*	Literacy Score, Non-Immigrants *(Average)*	Literacy Score, Immigrants *(Average)*	Gap in Score: Immigrants – Non-Immigrant *(Points)*
Australia	28	280	284	271	12.7
Russian Federation	6	275	276	270	5.9
Slovak Republic	2	274	274	268	5.7
Czech Republic	4	274	274	268	6.2
Ireland	21	267	268	263	4.7
Estonia	13	276	279	256	22.8
Canada	26	273	280	256	23.6
England and Northern Ireland (UK)	15	272	276	255	20.7
Austria	16	269	274	248	25.8
OECD Average	12	273	276	247	29.3
Netherlands	13	284	290	247	42.7
Norway	13	278	284	245	38.2
Flanders (Belgium)	8	275	278	242	36.6
Germany	14	270	275	241	33.8
Finland	6	288	291	240	51.1
United States	15	270	275	239	35.6
Denmark	12	271	275	238	37.6
Republic of Korea	2	273	273	235	37.8
Sweden	18	279	289	235	53.7
Spain	13	252	255	232	22.6
France	13	262	267	229	37.4
Italy	9	250	253	228	24.5
Japan	*	296	296	n.a.	n.a.
Poland	*	267	267	n.a.	n.a.

Note: Jurisdictions ranked in descending order of the scores of immigrants.

Source: Author's calculations using the PIAAC international data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac/.

immigrants, also places Canada above the OECD average, though not quite at the top (it is surpassed by six other countries).

The paradox is evident: two above-average scores are combining to equal an average score. Canada ranks sixth in terms of the literacy scores of immigrants and seventh in terms of the scores of non-immigrants; the scores of the two groups combined nonetheless places Canada in 11th spot overall.

The answer to the riddle, of course, lies in the relatively high proportion of immigrants in the Canadian population. Mathematically, the above-average scores for Canadian immigrants (compared with immigrants elsewhere) can still serve to lower the overall score for Canadian adults more so than in most OECD countries, simply because of the numerical weight of the immigrant population.

This can be illustrated by comparing Canada's results with those of two other countries, Finland and the Netherlands. As Table 4 shows, the comparatively poor performances of immigrants in Finland and the Netherlands do not have as great an effect on each country's overall performance, because the size of their immigrant populations is comparatively small. By contrast, Canada's overall score is affected more significantly by the score of its immigrant population, even though immigrants in Canada perform comparatively well.

To illustrate further, if Finland had the same proportion of immigrants in its population as Canada does, its overall score would drop 10 points, moving it from near the top of the rankings to closer to the middle of the pack; Netherlands's score would drop 5 points. With the same proportion of immigrants as Finland, Canada's score would rise 5 points, placing it above the international average. (See Table 1 to view the effect this would have on each country's rank.)

Discussion: How Education and Immigration Interact

This unpacking of the PIAAC results is helpful because it serves to bring the strengths of Canada's education systems back into focus.

To a significant extent, the average literacy score of immigrants is a reflection of the host country's selection criteria: the lower gap between the scores of immigrants and non-immigrants in Canada, for instance, is a function of the fact that Canada purposefully selects immigrants who are comparatively well educated. Another important factor to consider, however, is the positive impact of Canada's public education systems on the integration of immigrants.

In the first instance, PIAAC shows the extent to which Canada successfully integrates second-generation immigrants. In contrast to the typical experience across the OECD, the literacy scores of second-generation immigrants in Canada are above the Canadian average and specifically above the scores of those who are neither first- nor second-generation immigrants; that is, those who themselves and their parents were born in Canada (see Table 5).

Additionally, first-generation immigrants who arrive in Canada at a young age – before or during primary school – also meet with success. As adults, these immigrants have literacy scores that are either at or above the average for the whole population; what's more, this situation holds even for those who arrive speaking a language at home other than English or French. This is illustrated in Figure 2. In both Canada and the OECD, the literacy scores of adult immigrants who arrived in the host country as children are much better than those who arrived after high school, suggesting that school systems everywhere help with integration. But while in the OECD as a whole, first-generation immigrants never "catch up" to the average regardless of their age of arrival, in Canada

Table 4: Separate and Combined Literacy Scores of Immigrants and Non-Immigrants – Selected Countries

Country	Non-Immigrants Score	+	Immigrant Score	=	Total Score
Finland	Non-Immigrants Score = 291 Proportion of Non- Immigrants = 94%	+	Immigrant Score = 240 Proportion of Immigrants = 6%	=	Total Score = 288
Netherlands	Non-Immigrants Score = 290 Proportion of Non- Immigrants = 87%	=	Immigrant Score = 247 Proportion of Immigrants = 13%	=	Total Score = 284
Canada	Non-Immigrants Score = 280 Proportion of Non- Immigrants = 74%	=	Immigrant Score = 256 Proportion of Immigrants = 26%	=	Total Score = 273

Source: Author's calculations using the PIAAC international data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac/.

those who arrive at primary-school age either end up performing as well as, or even better than, the norm (cf. Busby and Corak 2014).

Once again, however, a closer examination of the PIAAC scores shines the light on the strengths of Canada's education systems not only as they pertain to immigrants, but to non-immigrants as well. Consider, for instance, how the paradox explored above plays out in the case of Canadian adults with a university degree.

As we saw, the placement of Canada's university educated adults below their OECD peers prompted a certain degree of consternation. But these headline results do not differentiate between those who are a product of Canada's education systems and those who brought their credentials with them from another country. This is a considerable oversight, given that Canada leads all the countries in the PIAAC study in terms of the proportion of its adult population whose highest educational qualification was obtained from another country: the proportion is 15 percent (the figure is even higher in BC (22 percent) and Ontario (20 percent)). And this figure takes into account all adults, regardless of what level of education was the highest completed. The proportion is even higher among those holding a university degree: 28 percent of university graduates in Canada earned their degree abroad (meaning, in most cases, that they immigrated to Canada with their degree in hand).

Unfortunately, figures regarding the proportion of university graduates who obtained their degree outside of their country of permanent residence are not as easily computed for the other countries in the study. We can, however, differentiate between immigrants and non-immigrants with a university degree.

The importance of immigration to the formation of Canada's human capital at the upper end of the education spectrum is clear: in the PIAAC sample, two out of every five university graduates in Canada were born outside the

Table 5: PIAAC Literacy Scores by Immigration Background

	First-Generation Immigrant	Second-Generation Immigrant	No Immigrant Background	All Adults
Canada	256	288	278	273
OECD Average	244	268	277	273

Source: Author's calculations using the PIAAC international data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac/.

country. This proportion is second only to that of Australia, and over two and a half times the OECD average. The proportion in BC and Ontario is even higher – almost one in every two university graduates in those provinces is an immigrant to Canada.

This situation reproduces the same paradox reviewed above (see Table 6). Canada's scores for all adults with a university degree are below the international average; but when the scores of both immigrant and non-immigrant university graduates in Canada are considered separately, each is above average. Despite the high scores of Canadian immigrants with a university degree compared to their peers in other countries, their relative weight in the total population of university graduates masks the success of university graduates born in Canada. The literacy scores of Canadian-born university graduates are not only well-above average, they trail those of only a relatively small number of other countries (notably Japan and Finland); scores of Canadian-born graduates living in BC, Ontario and Alberta in particular are among the best in the OECD.

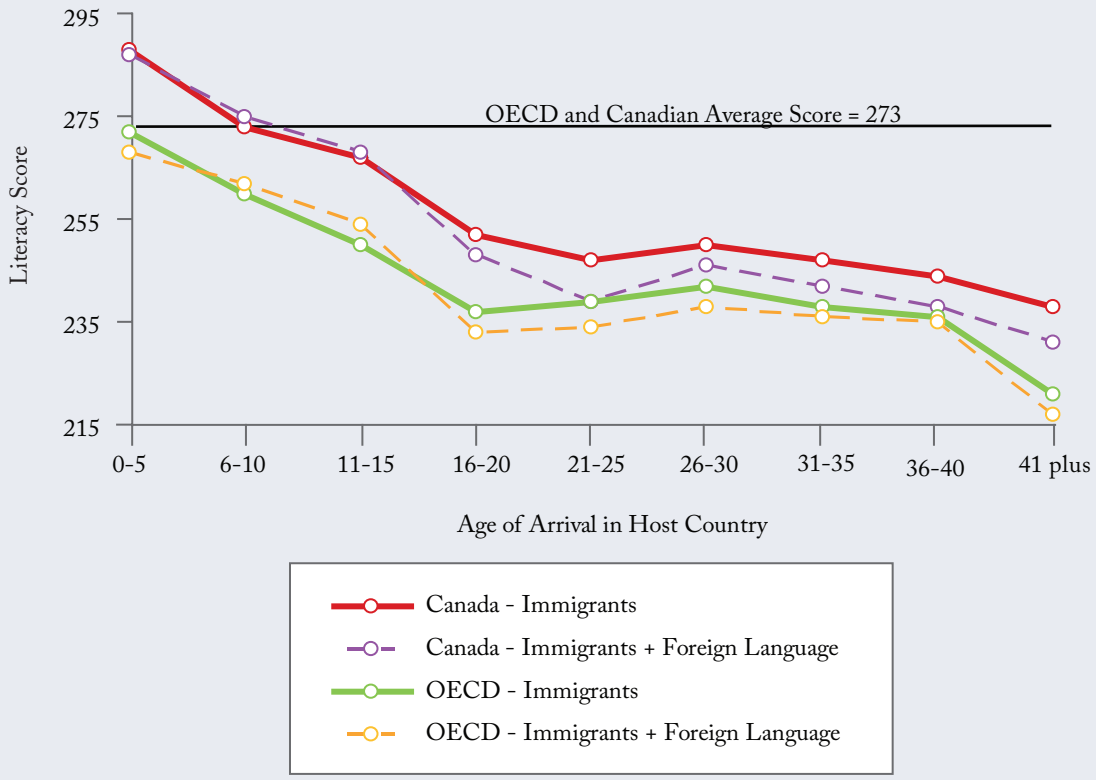
The unpacking of the PIAAC data thus reveals two success stories that are otherwise hidden from view: that of our education systems, which produce competitive graduates, and that of our immigration system, which attracts newcomers who are more highly skilled than immigrants elsewhere. Unfortunately, these successes are obscured when the numbers are melded together in the total population average.

This is not to suggest, of course, that there is no need for Canada's education systems to improve. In fact, the need to continually improve is more pressing than ever as other countries – and particularly those in Asia – make rapid improvements in their own systems. The international bar is being raised. This observation, however, is a truism that does not stem in any particular way from a consideration of the results of the PIAAC study of adult competencies.

Policy Responses

Canada should strive to improve its performance in the areas covered by PIAAC. For starters, we should zero in on those Canadians who are most likely to have skill deficits. These include: (i) those with lower levels of education; (ii) some groups of immigrants (notably older immigrants and those whose first language is neither English nor French); (iii) older workers in general and, more particularly, those with lower levels of education

Figure 2: Literacy Scores of Immigrants and Immigrants with a Foreign Language, by Age of Arrival in Host Country



Source: Author's calculations using the PIAAC data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac.

attainment; and (iv) many Aboriginal Canadians.[6] Figures 3A and 3B illustrate where some of the gains need to be made. Moreover, given the importance of immigration to human capital development in Canada, it is essential that we do as good a job as possible at ensuring the successful integration of newcomers into our labour market and society.

On this basis, the policy implications of the PIAAC results for Canada are as follows:

1. While continuing to prioritize the recruitment of highly educated immigrants to Canada, we should be more attentive to the difference between the technical know-how attested to by a diploma and a degree,

6 PIAAC results pertaining to Aboriginals merit separate consideration and are not shown here; some data are available at www.piaac.ca.

Table 6: Literacy Scores for University Graduates by Immigration Status			
	University – All Adults	**University – Non-Immigrants**	**University – Immigrants**
Canada	300	313	279
OECD average	302	307	277

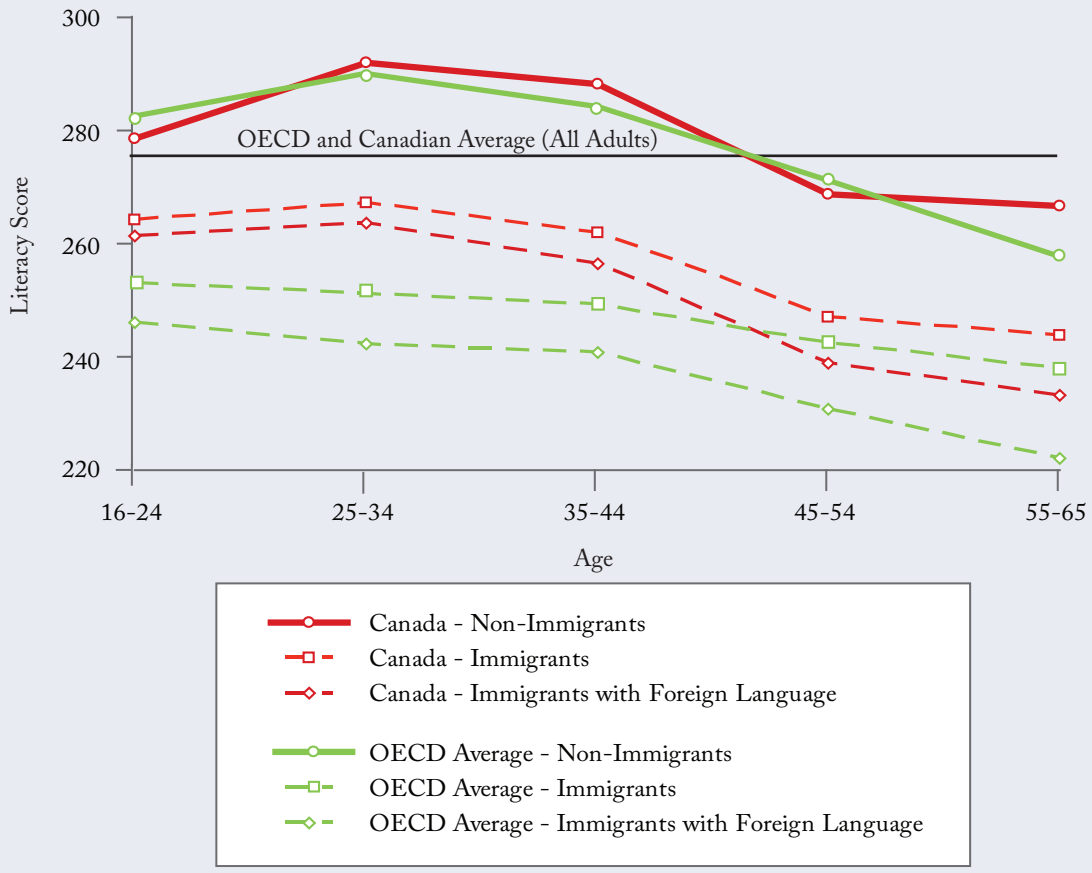
Source: Author's calculations using the PIAAC international data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac/.

and the basic competencies such as literacy in an official language. To say this is not to question the quality of foreign credentials, but to point out that success in the Canadian labour market requires not only specialized knowledge or technical skills but also proficiency in the processing and exchange of information in English or French. New immigrants, even if well-qualified, and even if employed after arrival, require more support in terms of language proficiency.[7]

2. We should augment our efforts to take advantage of the short-cut offered by recruiting foreign students in greater numbers and encouraging them to stay in Canada after graduation. The best way to make sure that immigrants to Canada have not only the right formal credentials but also the language skills, job experience, cultural capital and personal networks required for success is to ensure that they graduate from Canadian schools, colleges or universities. Canada already does much better at providing opportunities for foreign students to become permanent residents than do competitors in international education such as the UK. There is room, however, for a more integrated and strategic approach to international education that sees employers working with universities and colleges, and universities and colleges working with elementary and secondary schools, both to recruit the best foreign students with interests in areas that correspond with labour market needs, and to ensure their successful transition from education to employment.
3. In thinking about the stock of skills in our labour market, we need to make sure we do not become so fixated on the question of the quality of young graduates that we overlook those in the older age cohorts. The largest age cohort of workers in the Canadian labour force currently is those aged 45 to 54. These workers on average are less well-educated than today's youth, and, as expected, have seen their basic literacy and numeracy skills decline over time. Yet we will be reliant on them to drive our economic output for years to come. We need to offer more opportunities for training and continuing education in order to boost the skills of those whose time in the conventional classroom lie years behind them.

7 The Government of Canada has signed a number of agreements with provinces to provide partial funding for immigration settlement services. As part of these agreements, the provinces deliver language training services to newly arrived adults and families. A modest way to begin improving language proficiency for newly arrived adults would be with more objective, empirical assessment of language acquisition as a result of these courses.

Figure 3a: Literacy Scores by Age Group and Immigration Status

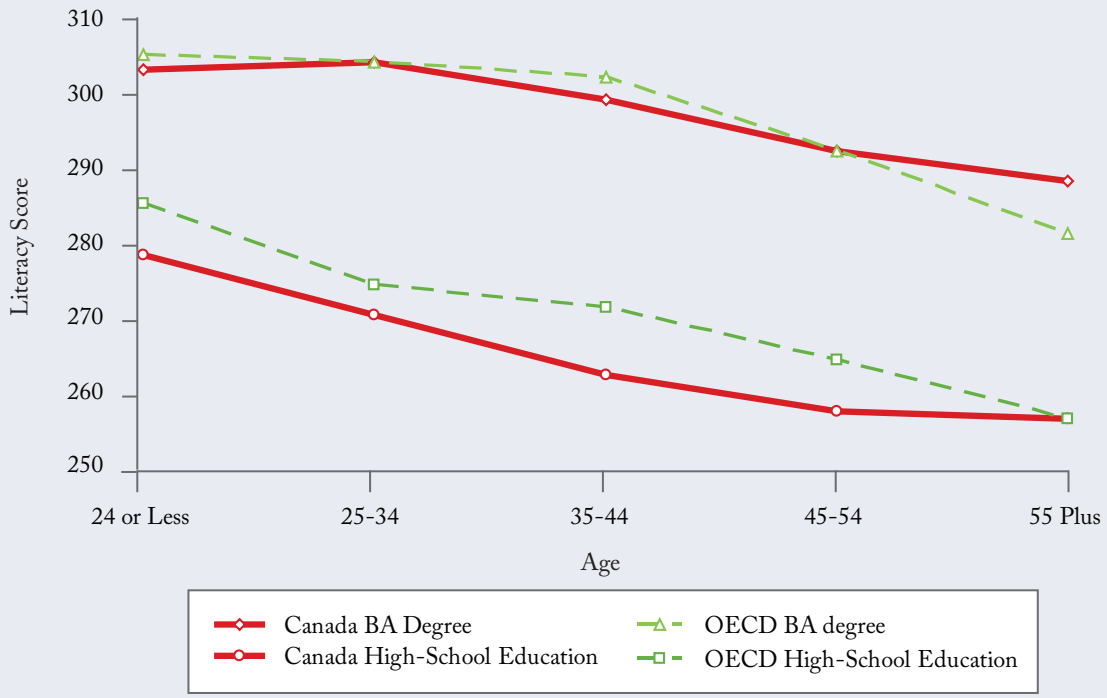


Source: Author's calculations using the PIAAC data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac.

This applies not only to those older workers who find themselves caught up in the midst of structural adjustments or downsizing; it applies to those who remain employed, for the simple reason that the environment within which even secure jobs are held is becoming more knowledge and technologically intensive by the day. According to PIAAC, however, only about one in three adult Canadians received any on the job training in the year before the survey was conducted; and while the literacy scores of those who did are much higher than those who did not, it is doubtful as to whether this is the result of training or because higher-skilled workers have more training opportunities. As is often the case, those in most need of a service are often the least likely to obtain it.

This last point highlights the challenge – and the potential costs – of achieving skill gains among lower-skilled populations; but the long-term economic and social costs of leaving skills gaps unaddressed are likely no less considerable.

Figure 3b: Literacy Scores by Education Status and Age group



Source: Author's calculations using the PIAAC data explorer: http://piaacdataexplorer.oecd.org/ide/idepiaac/.

Conclusion

This E-Brief demonstrates why the suggestion that Canada's average performance in the PIAAC study reflects poorly on its education systems is suspect. In Canada, adult literacy scores cannot be taken simply as a reflection of Canada's education systems. In countries with few immigrants, human capital is a direct consequence of domestic education systems; but in Canada it is a product of education and immigration combined. On this score, the results for Canadian adults who received their education in Canada are much more encouraging than the headline PIAAC ranking of countries would suggest.

The lessons for Canada from PIAAC are simple. Educational institutions can always be called on to do better. Boosting the performance of Canadian adults on international assessments of foundational skills such as literacy and numeracy, however, requires us to move beyond the knee-jerk tendency to take shots at our higher education institutions and focus on those Canadians whose performance on these assessments is actually below average. These are not today's graduates from our universities, but rather those groups for whom success in the labour market has been, and continues to be, more challenging.

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This E-Brief is a publication of the C.D. Howe Institute.

Andrew Parkin is an independent public policy analyst and consultant based in Oakville, Ontario. He is the former Director General of the Council of Ministers of Education.

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