

Selected, Edited, and with Issue Framing Material by:  
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# ISSUE



## Are International Comparisons Helpful?

**YES:** OECD, from "Learning from High-Performing Education Systems," OECD Publishing (2011)

**NO:** Anna Dall, from "Is PISA Counter-Productive to Building Successful Educational Systems?" *Social Alternatives* (2011)

### Learning Outcomes

After reading this issue, you will be able to:

- Evaluate U.S. performance on international assessments.
- Define the aims and methods of PISA.
- Enumerate the lessons for U.S. education as a result of international comparisons as articulated by PISA.
- Identify weaknesses in international comparisons.
- Define the testing culture and its role in schooling.

### ISSUE SUMMARY

**YES:** The OECD argues that if a country is committed to children and their education, the real test of their commitment is how they prioritize education against other commitments, such as youth sports. International comparisons therefore help illuminate why the United States is outperformed by other countries in math, science, and reading.

**NO:** Anna Dall argues that the PISA model is problematic and is counterproductive to building a successful educational system. She critiques the testing culture and believes that there needs to be a paradigm shift away from test performance.

**E**ver since the Soviets launched Sputnik in 1957 (the first satellite in outer space), American policy makers and big businesses have had to deal with the importance and harsh realities of global competition. One of the consequences of global competition for education was U.S. participation in the First International Mathematics Study (FIMS) in the 1960s, which surveyed 12 countries in mathematics among 13-year-olds. As more data related to U.S. student achievement became available over time, the publication of *A Nation at Risk* (1983), which was researched by the American President Ronald Reagan's National Commission on Excellence in Education, documented the poor performance of U.S. students on numerous national and international tests. Since then, U.S. policy makers have applied a great deal of pressure on the nation's educational system to reform.

Since FIMS, there have been two subsequent tests of international achievement: one is now referred to as the TIMSS (Trends in International Mathematics and Science Study) and the other is the PISA (Program for International Student Assessment). Each battery of tests measures different areas of knowledge and ability among different age/grade groups. TIMSS focuses on 4th and 8th graders whereas PISA focuses on 15-year-olds. TIMSS is more consistent with the school curriculum whereas PISA attempts to measure students' application of knowledge to real-world problems. Although dependent upon how many and which countries participate in the TIMSS, the pattern since the 1990s has been consistent. U.S. students perform about average overall and below average when compared to other countries that are as high as the United States on the Human Development Index. Additional analyses

has examined whether the performance of U.S. students varies by type of test or by type of student, such as top-performing vs. average-performing students. However, across the many different types of analyses conducted, U.S. students on average scored significantly lower than the top-performing countries.

Since the selections for this debate refer to the PISA test, it is informative to understand the latest PISA (2012) results. According to the PISA website (see Internet Resources), U.S. 15 year olds performed about average or slightly below average when compared to other countries that are members or partners of the OECD (the Organization for Economic Co-Operation and Development):

- the average performance in reading is 498 points, compared to an average of 496 points in OECD countries.
- the average performance in mathematics is 481 points in mathematics, the main topic of PISA 2012, compared to an average of 494 points in OECD countries.
- the average performance in science literacy is 497 points compared to an average of 501 points in OECD countries.

Results also indicated that Singapore, Hong Kong, Taipei, Korea, Macao, Japan, Liechtenstein, Switzerland, and the Netherlands were the top performers in mathematics; Shanghai-China, Hong Kong, Singapore, Japan, and Korea were the five highest-performing countries in reading; Shanghai-China, Hong Kong, Singapore, Japan, and Finland were the top five performers in science in PISA 2012 (OECD, 2014).

An important issue to address in this debate is what these results mean to Americans and whether we should do anything about them. It has been especially difficult to reach consensus upon the first part of the question, which is to recognize whether there is a problem or not. Much has been published to refute the claims that American students are underperforming given its diversity and size (e.g., Boe and Shin, 2005) whereas others note that this refusal is based in part by the unique ways in which Americans tend to seek and maintain positive illusions about their children (Ozturk and Debelak, 2008). For a long time, we have learned that when compared to Asian parents, U.S. parents have reported higher levels of satisfaction with their child's school and teachers despite significantly lower levels of performance (Stevenson et al., 1993) and have also been found to articulate a sense that their "kids are doing all right" whereas other cultures do not (e.g., Elliott et al., 2001).

Among those who concede that American students underperform, given its international status as a superpower and highly advanced economy, the lessons that the United States can learn from international comparisons plagues U.S. policymakers. However, many have identified that some of the sources of underperformance are cultural, bound and hard to change with new governmental policies. For example, certain languages can provide more of a less advantage for its speakers when referring to and using numbers. English language speakers can be seen to lack an advantage with regard to mathematical skills compared to Chinese language speakers. Cross-cultural research on the automatic processing of numbers has demonstrated the pronunciation of numbers in Chinese language (as well as other East Asian languages that use Chinese characters) helps facilitate its speakers to say numbers faster than English speakers and process numbers more efficiently (e.g., Chen and Stevenson, 1988). Additionally, the ten-based number system in Chinese helps to promote earlier number learning and faster computation.

PISA notes in detail many of the other culturally rooted sources of American underperformance in the "Yes" selection. American cultural values are among the first factors cited as a barrier to student achievement in general. Although PISA in the "Yes" selection assumes that these values can be changed because of our rhetoric emphasizing the importance of educational issues, the reality is that the American preference for entertainment, sports, and free play in daily life is hard for homework to compete with fairly. Comparing life in the rest of the world to life in the United States leaves one to wonder why such international comparisons are useful anyway. Unlike the amount of pressure and competition within countries like Korea and China, American youth enjoy societal conditions that are perceived to offer greater permeability to adulthood (Heckhausen and Chang, 2009). Thus, many will ignore international comparisons by citing that the societal context is simply different. Of course U.S. companies are already prowling the world for the most qualified and work-oriented persons and not limiting themselves to the U.S. population. U.S. businesses are even relocating headquarters outside of the United States to take advantage of the global labor market of highly skilled workers.

The question debated in this issue can require you, as a student of education, to consider and weigh the importance of global competition and the relevance of work-related outcomes but as a student of (cross-cultural) psychology, it should also get you to think about the need to refer to the different social contexts of other nations that are conducive to the academic development of children. In considering these issues, Anna Dall'Aglio

in the "No" selection that the results of tests that measure reading, math, and science skills are counterproductive to efforts of building a world-class educational system because it is akin to comparing apples to oranges. In other words, comparison between the United States and other top-performing countries, such as China, Hong Kong, and Korea, is counterproductive because the focus on test results in education has even been criticized within these countries. PISA, on the other hand, believes that cross-national comparisons are insightful for Americans because the differences seen around the world in producing world-class students should convince us that we also have the ability to develop a commitment to education . . . if we want to.

## References

E. E. Boe and S. Shin, "Is the United States Really Losing the International Horse Race in Academic Achievement?" *Phi Delta Kappan* (86, 2005).

C. Chen and H. W. Stevenson, "Cross-Linguistic Differences in Digit Span of Preschool Children,"

*Journal of Experimental Child Psychology* (vol. 46, 1988).

J. G. Elliott, N. R. Hufton, L. Illushin, and W. Willis, "'The Kids Are Doing All Right': Differences in Parental Satisfaction, Expectation and Attribution in St. Petersburg, Sunderland and Kentucky," *Cambridge Journal of Education* (vol. 31, 2002).

J. Heckhausen and E. S. Chang, "How Ambition Can Help Overcome Social Inequality in the Transition to Adulthood," *Research on Human Development* (vol. 6, 2009).

M. A. Ozturk and C. Debelak, "The Unique American Vision of Childhood," *International Review of Education* (vol. 54, 2008).

OECD, *PISA 2012 Results in Focus: What 15-Year-Olds Know and What They Can Do with What They Know* (2014). Available online at [www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf](http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf)

H. W. Stevenson, C. Chen, and S. Y. Lee, "Mathematics Achievement of Chinese, Japanese, and American Children: Ten Years Later," *Science* (vol. 259, 1993).



**YES** 

## Learning from High-Performing Education Systems

### Developing a Commitment to Education and a Conviction that All Students Can Achieve at High Levels

Many nations declare that they are committed to children and that education is important. The test comes when these commitments are weighed against others. How do they pay teachers compared to the way they pay others with the same level of education? How are education credentials weighed against other qualifications when people are being considered for jobs? Would you want your child to be a teacher? How much attention do the media pay to schools and schooling? When it comes down to it, which matters more, a community's standing in the sports leagues or its standing in the student academic achievement league tables? Are parents more likely to encourage their children to study longer and harder or to want them to spend more time with their friends or playing sports?

In the countries with the highest performance, teachers are typically paid better relative to others, education credentials are valued more, and a higher share of educational spending is devoted to instructional services than is the case in the United States, where parents may not encourage their children to become school teachers if they think they have a chance of becoming attorneys, engineers, doctors or architects. The value placed on education is likely to influence the choices that students make about whether to study or head down to the ball field or hang out with their friends on the corner, and, later, whether the most capable students decide on school teaching, or something with higher social status, as a career. It has an effect on the willingness of the public to honour the views of professional educators or dismiss them.

Some will say that these are cultural matters and not amenable to change, but the preceding chapters suggest that in countries with little in the way of natural resources,

such as Finland, Singapore and Japan, education appears to have a high status at least in part because the public at large has understood that the country must live by its wits and its wits depend on the quality of education. That is, the value that a country places on education depends in part on a country's view of how human capital fits into the way it makes its living. Placing a high value on education may be an underlying condition for building a world-class education system, and it may be that most countries that have not had to live by their wits in the past will not succeed unless their political leaders explain why, though they might not have had to live by their wits in the past, they must do so now.

But placing a high value on education will get a country only so far if the teachers, parents and citizens of that country believe that only some subset of the nation's children can or need to achieve high standards. This volume shows a distribution of attitudes on this point. Brazil inherited a situation in which the people who gained control of it when it was colonised assumed that the people they conquered and the people they enslaved had so little to offer they were not worth educating. Germany is a country in which it was widely assumed until recently that the children of working-class people would themselves get working-class jobs and would not profit from the curriculum offered by the *Gymnasium*. PISA shows these attitudes to be mirrored in the perception of students about their own educational future. While in Germany only a quarter of 15-year-olds in PISA said that they expect to go on to university, fewer than those who actually will, in Japan and Korea, 9 out of 10 students said they expected to do so. The results of these differences can also be seen in the distribution of student performance within each of these countries and in the impact that socio-economic background has on learning.

Furthermore, the writings of some educational psychologists in the United States, from Terman on, have

fostered a widespread notion that student achievement is mainly a product of inherited intelligence, not hard work. This is also mirrored in results from the Third International Mathematics and Science Study, where a significant share of American students reported that they needed good luck rather than hard work to do well in mathematics or science, a characteristic that was consistently negatively related to performance. Teachers may feel guilty pressing students who they perceive to be less capable to achieve at higher levels because they think it unfair to the student to do so. Their goal is then likely to enable each student to achieve up to the mean of students in their classrooms rather than, as in Finland, Singapore or Shanghai-China, to achieve high universal standards. A comparison between school marks and performance of American students in PISA also suggests that teachers often expect less of students from lower socio-economic backgrounds even if the students show similar levels of achievement. And those students and their parents may expect less, too. This is a heavy burden for the American education system to bear, and it is unlikely that the United States will achieve performance parity with the best-performing countries until it, too, believes, or behaves as if it believes, that, with enough effort and support, all children can achieve at very high levels.

In contrast, in Finland, Japan, Singapore, Shanghai-China and Hong Kong-China, parents, teachers and the public at large tend to share the belief that all students are capable of achieving high standards and need to do so. This volume provides a wealth of instructive examples for how public policy can support the achievement of universal high standards. One of the most interesting patterns observed among some of the highest-performing countries was the gradual move, in many of them, from a system in which students were streamed into different types of secondary schools, with curricula set to very different levels of cognitive demand, to a system in which all students now go to secondary schools with curricula set to much the same high level of cognitive demand. Those countries did not accomplish this transition by taking the average of the previous levels of cognitive demand and setting the new standards to that level. Instead, they "levelled up," requiring all students to meet the standards that they formerly expected only their elite students to meet. In these top-performing education systems, all students are now expected to perform at the levels formerly thought possible only for their elites.

Recognising that the road to dropping out of high schools starts early, Ontario created the "Student Success Initiative" in high schools. Rather than sending out a team from the ministry, they gave the districts money to

hire a Student Success leader to co-ordinate efforts in their district. The ministry also gave money for the district leaders to meet and share strategies. Again, each high school was given support to hire a provincially-funded Student Success teacher and was required to create a Student Success team to track early indicators of academic struggles and design appropriate interventions. The outcomes of this work have changed Ontario's system profoundly, and within a few years the high school graduation rate increased from 68 to 79 percent.

With a different institutional setup, Finland's special teachers fulfil a similar role of early diagnosis and support, working closely with classroom teachers to identify students in need of extra help, and then working individually or in small groups with struggling students to provide the extra help and support they need to keep up with their classmates. It is not left solely to the discretion of the regular classroom teacher to identify a problem and alert the special teacher; every comprehensive school has a "pupils' multi-professional care group" that meets at least twice a month for two hours, and which consists of the principal, the special teacher, the school nurse, the school psychologist, a social worker, and the teachers whose students are being discussed. The parents of any child being discussed are contacted prior to the meeting and are sometimes asked to be present.

Underpinning the entire Singaporean education system is the belief—for students of all ethnic backgrounds and all ranges of ability—that education is the route to advancement and that hard work and effort, not inherited intelligence, is the key to success in school. Singapore, too, had a system of streaming in its elementary schools that it later moderated as it raised its standards. And Singapore uses a wide range of strategies to make sure that student difficulties are diagnosed early and that students who are even just beginning to fall behind are immediately diagnosed properly and given whatever help is needed to get them back on track as quickly as possible. The success of the government's economic and educational policies has brought about immense social mobility that has created a shared sense of national mission and made cultural support for education a near-universal value.

In all these education systems, universal high expectations are not a mantra but a reality and students who start to fall behind are identified quickly, their problem is promptly and accurately diagnosed and the appropriate course of action is quickly taken. Inevitably, this means that some students get more resources than others because the needs of some students are greater; but it is the students with the greatest needs who get the most resources, for that reason.

It has taken most countries time to get from a belief that only a few students can achieve to the point where most educators embrace the proposition that all can do so. It takes a concerted, multifaceted programme of policy making, capacity building and the development of proof points to get to the point at which most educators believe it can be done. But no education system included in this study has managed to achieve sustained high performance without developing a system that is premised, in detail, on the proposition that it is possible for all students to achieve at high levels and necessary that they do so. The importance of recent developments in American federal education policy to set the clear expectation that all students should be taught to the same standards and held to the same expectations cannot be overestimated. The No Child Left Behind Act of 2001 required all schools to make progress towards a state-determined standard of "proficiency" for all students, and the Obama administration has supported the states in their efforts to put in place more rigorous state standards linked to college and career readiness, with an increased focus on the instructional systems and teacher support necessary to ensure that all students are held and taught to these same expectations. The challenge ahead will be to back those expectations up with the kinds of student, parent and school support systems that characterise today's most advanced education systems.

### **Establishing Ambitious, Focused and Coherent Education Standards that Are Shared across the System and Aligned with High-Stakes Gateways and Instructional Systems**

Fifteen-year-olds in the United States often rate themselves comparatively highly in academic performance in PISA, even if they did not do well comparatively. In part, that may be due to culture, but one interpretation is also that students are being commended for work that would not be acceptable in high-performing education systems. The results from PISA suggest that, across OECD

countries, schools and countries where students work in a climate characterised by high performance expectations and the readiness to invest effort, good teacher-student relations, and high teacher morale tend to achieve better results.

One trend across countries over recent years has been for countries to articulate the expectations that societies have in relation to learning outcomes and to translate these expectations into educational goals and standards. All of the high-performing countries profiled in this volume have developed world-class academic standards for their students and their existence tends to be a consistent predictor for the overall performance of education systems. The approaches to standard-setting in OECD countries range from defining broad educational goals up to formulating concise performance expectations in well-defined subject areas. Whatever the approach, such standards shape high-performing education systems by establishing rigorous, focused and coherent content at all grade levels; reducing overlap in curricula across grades; reducing variation in implemented curricula across classrooms; facilitating co-ordination of various policy drivers, ranging from curricula to teacher training; and reducing inequity in curricula across socio-economic groups.

The establishment, by states, of "common core standards" in the United States follows a similar line of reasoning, with the potential to address the current problem of widely discrepant state standards and assessment cut scores that have led to non-comparable results. These non-comparable standards often mean that a school's fate depends more than anything else on in what state the school is located. More important, students across the United States are left on an unequal footing as to how well they are prepared to compete in the United States labour market.

**THE OECD** (Organization for Economic Cooperation and Development) is a forum where the governments of 34 democracies and more than 70 partner countries work together to promote economic growth, prosperity, and sustainable development. The OECD conducts the PISA, the Programme for International Student Assessment, which was started in 1997.

Anna Dall



## “Is PISA Counter-Productive to Building Successful Educational Systems?”

### Introduction<sup>1</sup>

Globalisation is a complex concept that has become a household term, uncritically used by economists, politicians, journalists, researchers as well as the general public to explain almost anything and everything. However, for some, globalisation carries the threat of a homogenised world where nations and cultures are neutralised, and for others the hope for a more inclusive and fair world order. It can bring people together in peace and harmony and it can lead to encounters such as 9/11 and AIDS (Ball, 1998; Anleu, 1999; Hirst and Thompson, 1999; World Bank, 2002; Raab *et al.*, 2008). Few would refute though that it is a very real phenomenon affecting economic, political and cultural institutions as well as people's identity, expectations and aspirations. It is even depicted as a natural and inevitable progression of societal development; TINA (There Is No Alternative) has become the established consensus (Sidhu and Matthews, 2005; Rizvi and Lingard, 2010).

When the actual term “globalisation” was coined in the 1980s it initially referred to the economic domain, but quickly came to be applied also in the political and cultural fields, key features being borderless networking by supranational companies and organisations in the promotion of global competition. Highly industrialised countries have moved into high knowledge, high tech production areas, which demand highly skilled workers. At the same time, they aim at keeping social costs down for increased cost efficiency with the intention of attracting international investment (see Ball, 1998; Green, 1999; Henry *et al.*, 1999; Rizvi and Lingard, 2000, 2010; Zambeta, 2005; Spring, 2008). In this market economy, services and ideas are central, and a country's long-term economic growth and prosperity are perceived to depend on how well the education system is aligned with market demands, and how well it is preparing citizens for future

study and work in a globalised economy. Competitiveness in the global economy has led to competition in the educational area, since one is assumed to be based on the other. Education has become a commodity and is at present more closely tied to the economic system than ever before (Reynolds *et al.*, 2002; Cheung and Chan 2009; Little and Green, 2009).

According to Carnoy and Rhoten (2002), education is affected by globalisation by way of decentralisation and privatisation, choice and accountability. Efficiency has come to characterise the new epistemology and its focus on performance and achievement outcomes has led to the emergence of a virtual testing culture, both on a national and an international scale. Of major importance is then, of course, who constructs these tests and sets the standards (Ball, 1998; Anleu, 1999; Hirst and Thompson, 1999; World Bank, 2002; Raab *et al.*, 2008).

Since the initiation of the Program for International Student Assessment (PISA) in 2000, the Organisation for Economic Co-operation and Development (OECD) has become a major authority on the quality of educational systems, and proffered policy recommendations have a considerable impact on national education policies (Grek, 2009).

### The PISA Framework

#### The Aims:

PISA is an ambitious, collaborative and innovative project conducted by countries consenting to compare the outcomes of their educational systems in an internationally accepted common framework. The surveys are conducted three-yearly, with the focus alternating between reading literacy, mathematical and scientific literacy (in 2003 problem solving was also included), which means that performance can be measured at a certain point in time and also compared over time. Great attention is paid to the construction of tests, so that they are culturally and

Dall, Anna. “Is PISA Counter-Productive to Building Successful Educational Systems?” *Social Alternatives*, 2011. Copyright © 2011 by Social Alternatives. Used with permission.

socially unbiased, all test items are unanimously agreed upon and translation processes are rigorous. For each cycle, an increasing number of nations have taken part, and at present 70 countries are involved (McGaw, 2008; Schleicher, 2009).

PISA is based on the premise that a nation's economic growth is largely dependent on the quality of its human capital; thus PISA can be seen as an expression of globalisation of education. The aim of PISA is to define educational goals relevant for adults in the knowledge society, to set standards and to evaluate how well education systems perform in comparison to each other, with a view to isolating factors that contribute to, or hinder, high achievement outcomes and gender and social equity (OECD, 2001; 2004).

The innovative factor in the PISA surveys is that students are assessed not against their national school curricula but against "how well young adults near the end of compulsory schooling are prepared to meet the challenges of today's knowledge societies and the challenges of adult life in the real world" (OECD, 2001; Kirsch *et al.*, 2002). Thus PISA should reflect what skills and knowledge participating countries deem are required for national and individual success in the global knowledge society, and how education systems can promote these goals in the most effective way.

## Effective Education Systems in PISA Terms

What then characterises an effective education system? Globalised education efficiency has come to be evaluated by performance related to cost. Performance in turn is assessed by testing students against various sets of measurable goals. Thus quantification now defines progress in education. If a variable cannot be measured, no progress can be evidenced. Education takes on an instrumental dimension defined by cognitive abilities that can easily be put to the test (Moutsios, 2010; Rizvi and Lingard, 2010). PISA can be seen as an expression of this trend. In PISA terms, the qualities that prepare students to meet the challenges of today's knowledge societies and the challenges of adult life in the real world are clearly competency in reading, mathematical and scientific literacy. Consequently, effective education systems are defined by how well students are performing in the PISA surveys. Few would argue that high levels of proficiency in these key subjects are essential for the growth of individuals as well as nations. Some would certainly argue though that they merit the sole focus to the detriment of higher order skills. Were the goals different, an effective education system would be different.

## The Testing Culture

Advocates of the testing culture claim that testing is necessary for transparent accountability (Bita, 2009). While formative testing conducted by the individual teacher can be beneficial it has not been shown that frequent, summative, standardised testing improves performance; rather, the opposite. It has been linked to an increase in student drop out, student and teacher cheating and teachers leaving the profession (Sahlberg, 2007; Mitchell *et al.*, 2009; Peters and Oliver, 2009). It creates a fear of failing in teachers and students, and effectively breeds a dislike of schools and learning, thus counteracting the goal of lifelong learning and a learning society promoted by PISA, and others as a cornerstone for the knowledge society (Sahlberg, 2007; Mitchell *et al.*, 2009; Peters and Oliver, 2009). It should also be considered that test results show what students have gained at a superficial level, but not necessarily learned and understood at an abstract level. Finally, tests do not automatically show the efficacy of the educational system—performance can be a result of activities outside of school, such as private tutoring (Sahlberg, 2007).

History is again repeating itself. Welch (1998) relates that as long ago as the 1860s it was suggested that UK schools should be run like businesses and be accountable for results. Thus standards were set for what should be attained by the students, who had to attend school 200 times per year before the test could be taken. Teachers' pay was linked to student attendance and their passing the exams, which led to examples of sick children being forced to school, cheating, a narrowing of the curriculum taught, cramming and rote learning—already then teachers were teaching to the test.

## Is the PISA Model What Is Needed for Future Education?

The view of education and what it means to be educated and to learn have changed. While previously having been a positive in itself, educational value is today measured by what competencies can benefit the individual and the society in the global competition. A different kind of person is sought to be schooled: a person skilled in communication (mother tongue), maths, science, problem solving; a person who is also information literate, globally minded, multilingual, interculturally versed, mobile, adaptable, level headed in crisis, flexible, creative with proper work attitudes and interpersonal skills; and a lifelong learner (Ball, 1998; Spring, 2008; Cheung and Chan, 2009; Rizvi and Lingard, 2010). Thus a paradigm shift in education is required. The linear and static view developed

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in the industrial era needs to be replaced by meta-cognitive and fluid processes that foster ingenuity and entrepreneurship. The knowledge economy values leadership and team-work. Therefore academic, cognitive intelligence has to share the focus with emotional intelligence of intra-personal and inter-personal skills. A learning society is called for where life-long learning is part of life. Thus students need to develop a love of learning. This can only occur in a classroom where teachers and students feel safe, supported, encouraged to take risks and prepared to make mistakes, where attention is paid to the individual's inherent talents (Sahlberg, 2006; Sahlberg and Oldroyd, 2010).

In Bill Gates' words: "training the workforce of tomorrow with the high schools of today is like trying to teach kids about today's computers on a 50-year-old mainframe. It is the wrong tool for the times" (cited in Sahlberg, 2006).

However, such higher order processes are features that are not easily measured in standardised tests and thus do not fit into the current education efficiency model of transparent accountability and the PISA surveys, which highlights a paradox: a range of higher order processes are seen to be needed for individuals and nations to prosper in the global knowledge society; yet at the same time, PISA is taking on ever increasing importance in evaluating an ever increasing number of education systems. Thus countries that obtain the highest achievement outcomes in the PISA surveys are judged to have world class education systems with students ready to meet real life challenges in the future global world. This PISA governance is leading to an ever increasing consensus that curricula need to be focused (narrowed) and that increased standardised testing is necessary to monitor performance outcomes.

## Narrowed Curricula and the Purpose of Schooling

The pursuit of a more competitive education system and improved PISA rankings motivate many countries to narrow and standardise curricula, a process that some claim is also standardising the students, as not enough attention can be paid to individual talents and potential, with the effect that many students feel they do not fit, and leave school as soon as they can. Standardisation, it is claimed, destroys creativity and system innovation (Peters and Oliver, 2009; Sahlberg and Oldroyd, 2010).

The PISA focus on "real life" skills such as literacy and numeracy promotes a more pragmatic view of the value of education to the exclusion of educational aims concerning, for example, democratic participation, moral and aesthetic development (Sahlberg, 2006; Grek, 2009; Dall, 2010). The

above mentioned higher order skills are commonly referred to as desirable in education for the knowledge economy, but are excluded as they escape quantification.

This leads to the question of what constitutes the main purpose of schooling. Educational goals are typically identified in national steering documents, and in most countries these documents strongly emphasise the students' personal, physical, mental and social development, naming academic performance as only one of a range of goals, but this may well be regarded as politically correct rhetoric if classroom practices are predominantly concerned with academic performance, to better meet testing requirements. If successful schooling does equal fostering independent, socially skilled individuals who can actively participate in, and contribute to a democratic society, studies such as the international civics survey (Torney-Purta *et al.*, 2001) should not go unnoticed and be virtually generally unknown (Dall, 2010).

If effective education systems were measured against these broad national steering documents instead of the narrow PISA focus, the world class education systems thought worthy of being emulated would look totally different.

## The Exception—A Model?

PISA top performers are typically not top performers in the global economy, even though PISA is based on this presumed correlation (OECD, 2001; 2003). However, there is one exception—Finland has continuously, since the PISA inception in 2000, been an overall PISA top achiever and concurrently a top ranked competitive economy (Sahlberg, 2006).

Paradoxically, the Finns do not embrace standardised testing based on competition between individuals and groups and thus favour more quantifiable knowledge and skills. Instead, the Finns adhere to the "culture of trust." Finnish education policies are based on deeply rooted values of equity and equality and school is seen as a place where all students should be able to develop their unique talents, in all areas, to the greatest potential, in an inclusive, holistic and caring school culture. Basically all schools are state funded. There is no streaming or ability tracking. Finnish teachers are rigorously selected and highly educated as all must hold a Masters degree, which means that a primary school teacher studies for a minimum of five years and a subject teacher between six and seven years. Therefore, teachers are highly valued and respected in society, and consequently trusted not only to be able to educate children in an optimal way (in cooperation with principals, parents and the local community), but also to autonomously evaluate and assess their

learning without any national, standardised tests. Students are assessed in relation to their individual progress, and extra support is at the ready when needed (Aho *et al.*, 2006; Sahlberg, 2007; Peters and Oliver, 2009; Simola *et al.*, 2009). This "intelligent accountability" may seem unsettling to staunch believers in "transparent accountability." However, the Finns believe this system generates not only higher performance, but also broader and more genuine learning outcomes. The PISA results seem to validate this confidence as the Finnish students obtain high average results combined with small standard deviation, which means that no matter what school the child attends s/he is guaranteed a quality education (OECD, 2004; Aho, *et al.*, 2006; Sahlberg, 2007).

## Conclusion

Is PISA counter-productive to building successful educational systems? The response is open. Education opens the door to tomorrow's society. Today we are faced with the choices.

The main trend at present seems to be to drive down the broad, reductionist PISA highway flanked by narrowed curricula, quantified knowledge and skills easily measured by high-stakes standardised testing, keeping our fingers crossed that what can be learnt on the old mainframe will be enough for our future needs.

The Finland road promises more: signs point to a high performing, holistic and inclusive education culture where equity and quality are combined; knowledge is not quantified for the simplicity of it but higher order processes are alive and well; academic proficiency is valued equally with, for example, creative, aesthetic, athletic, moral and democratic outcomes. However, this road is also intimidating. There is no quick and easy way to get to the destination, and there is the chance of getting lost and never getting there. But no doubt this is the far better alternative.

## References

- Aho, E., Pitkänen, K. & Sahlberg, P. 2006 *Policy Development and Reform Principles of Basic and Secondary Education in Finland since 1968*, World Bank, Washington DC.
- Anleu, S. R. 1999 'Sociologists confront human rights the problem of universalism', *Journal of Sociology*, 352: 198-212.
- Ball, S. J. 1998 'Big Policies/Small World an introduction to international perspectives in education policy', *Comparative Education*, 342: 119-130.
- Bitá, N. 2009 'Testing foes want happy, uneducated kids Gillard', *The Australian*, 13 November 2009. Retrieved from <http://www.theaustralian.com.au/news/nation/testing-foes-want-happy-uneducated-kids-gillard/story-e6frg6nf-1225797124314>
- Carnoy, M. & Rhoten, D. 2002 'What Does Globalization Mean for Educational Change? A Comparative Approach', *Comparative Education Review*, 461: 1-9.
- Cheung, H. & Chan, A. 2009 'Education and competitive economy how do cultural dimensions fit in?' *Higher Education*, 595: 525-541.
- Dall, A. 2010 'PISA and reading literacy—comparing apples and oranges?' Paper presented at the 23rd International Congress for School Effectiveness and Improvement Conference, ICSEI 2010.
- Green, A. 1999 'Education and globalization in Europe and East Asia convergent and divergent trends', *Journal of Education Policy*, 141: 55-71.
- Grek, S. 2009 'Governing by numbers the PISA "effect" in Europe', *Journal of Education Policy*, 241: 23-37.
- Henry, M. Lingard, B., Rizvi, F. & Taylor, S. 1999 'Working with/against globalization in education', *Journal of Education Policy*, 141: 85-97.
- Hirst, P. & Thompson, G. 1999 *Globalization in Question*, 2nd ed., Polity Press, Cambridge.
- Kirsch, I. de Jong, J. Lafontaine, D., McQueen, J., Mendelovits, J. & Monseur, C. 2002 *Reading for Change. Performance and Engagement across Countries. Results from PISA 2000*, OECD, Paris.
- Little, A. & Green, A. 2009 'Successful globalisation, education and sustainable development', *International Journal of Educational Development*, 292: 166-174.
- McGaw, B. 2008 'The role of the OECD in international comparative studies of achievement', *Assessment in Education Principles, Policy & Practice*, 153: 223-243.
- Mitchell, D. Gerwin, D. Schuberth, E. Mancini, M. & Hofrichter, H. 2009 'Assessment without High-Stakes Testing Protecting Childhood and the Purpose of School', *Independent Teacher*, 62. Retrieved from [http://www.whyywaldorfworks.org/03\\_NewsEvents/documents/AlternativeAssessment.pdf](http://www.whyywaldorfworks.org/03_NewsEvents/documents/AlternativeAssessment.pdf)
- Moutsios, S. 2010 'Power, politics and transnational policy-making in education', *Globalisation, Societies and Education*, 81: 121-141.
- OECD 2001 *Knowledge and Skills for Life First Results from the OECD Programme for International Student Assessment PISA 2000*, OECD, Paris.

- OECD 2004 *Learning for Tomorrow's World, first results from PISA 2003*, OECD, Paris.
- Peters, S. & Oliver, L. 2009 'Achieving quality and equity through inclusive education in an era of high-stakes testing', *Prospects*, 393: 265-279.
- Raab, M. Ruland, M., Schonberger, B., Blossfeld, H.-P., Hofacker, D., Buchholz, S., et al. 2008 'Global Index A Sociological Approach to Globalization Measurement', *International Sociology*, 234: 596-631.
- Reynolds, D. Stringfield, S. Teddlie, C. & Creemers, B. 2002 'The intellectual and policy context' in D. Reynolds, B. Creemers, S. Stringfield, C. Teddlie & G. Schaffer (eds.), *World Class Schools. International Perspectives on School Effectiveness*, Routledge Falmer, London.
- Rizvi, F. & Lingard, B. 2000 'Globalization and Education Complexities and Contingencies', *Educational Theory*, 504: 419.
- Rizvi, F. & Lingard, B. 2010 *Globalizing Education Policy*, Routledge, London.
- Sahlberg, P. 2006 'Education Reform for Raising Economic Competitiveness', *Journal of Educational Change*, 74: 259-287.
- Sahlberg, P. 2007 'Education Policies for raising Student Learning; The Finnish Approach', *Journal of Education Policy*, 222: 147-171.
- Sahlberg, P. & Oldroyd, D. 2010 'Pedagogy for Economic Competitiveness and Sustainable Development', *European Journal of Education*, 452: 280-299.
- Schleicher, A. 2009 'Securing quality and equity in education lessons from PISA', *Prospects*, 393: 251-263.
- Sidhu, R. & Matthews, J. M. 2005 'International Education For What? Under What Conditions? The Global Schoolhouse Project', *Social Alternatives*, 244: 6-12.
- Simola, H. Rinne, R. Varjo, J. Pitkänen, H. & Kauko, J. 2009 'Quality assurance and evaluation (QAE) in Finnish compulsory schooling—a national model or just unintended effects of radical decentralisation?' *Journal of Education Policy*, 242: 163-178.
- Spring, J. 2008 'Research on Globalization and Education', *Review of Educational Research*, 782: 330-363.
- Torney-Purta, J. Lehmann, R. Oswald, H. & Schulz, W. 2001 *Citizenship and Education in Twenty-eight Countries Civic Knowledge and Engagement at Age Fourteen*, The International Association for the Evaluation of Educational Achievement, Amsterdam.
- Welch, A. R. 1998 'The Cult of Efficiency in Education. Comparative reflections on the reality and the rhetoric', *Comparative Education*, 342: 157-175.
- World Bank 2002 *Globalization, Growth, and Poverty Building an Inclusive World Economy. A World Bank Policy Research Report*, World Bank, New York.
- Zambeta, E. 2005 'The survival of nationalism in a globalized system' in D. Coulby & E. Zambeta (eds) *World Yearbook of Education 2005. Globalization and nationalism in education*, RoutledgeFalmer, London: 59-88.

## Endnote

1. This article is based on a submitted thesis entitled "A crossnational, comparative study of cultural factors underpinning 15-year-old students' performance in reading literacy in Finland, Sweden, Australia and Indonesia." This article is a shortened version of a paper presented at the XVII World Congress of Sociology in Gothenburg, Sweden in 2010. I would like to thank the two anonymous peer reviewers for their valuable comments.

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# EXPLORING THE ISSUE



## Are International Comparisons Helpful?

### Critical Thinking and Reflection

1. What lessons identified by PISA are reasonable to institute now?
2. Do Americans care about the quality of their schools?
3. Is there a relation between the test performance of a country and its economic security in the future?
4. Why are many Asian students coming to America for college and university?

### Is There Common Ground?

This debate is able to take place because both sides can acknowledge the results that U.S. students are not the top performers in the world and can even agree (perhaps after some nudging of the “No” side) that U.S. students are actually underperformers given our status as a leader on the world stage. In assessing the usefulness of these results, Anna Dall articulates the feeling of many in this country, which is that international comparisons are uninformative in efforts to build a better system because we begin to teach to the test and value test performance over other educational values. However, what many on the “No” side fail to recognize is that these results are not intended to do that.

As PISA pointed out, what these results really mean is that a comparison between the United States and top-performing countries reveals very interesting insights about the United States. First, top-performing countries pay their teachers more and spend more on instructional costs than the United States (e.g., teachers are among the lowest prestigious jobs in this country and very little is invested in assessment). Although not part of the selection published in this issue, other sections of this PISA publication note that our educational assessments lack quality (i.e., we use multiple choice questions to assess student performance whereas top-performing countries use open-ended qualitative assessments). Second, top-performing countries expect that all students can achieve high standards regardless of social background. For example, those who refute that the United States is not doing well in international comparisons because we have a more diverse student body can be seen to have also assumed that poor and disadvantaged students are not *able* to do well. The implied conclusion is that America does not *really* care about its educational system because if it did, it would respect the job of teaching and expect much more from its children than it does currently. As can be seen around the world, human children can rise to the challenges of education.

Ultimately, the differing rates of student achievement found on international comparisons are valuable and interesting because human groups around the world are not thought to be more or less intelligent from one another. Thus, when some groups flourish whereas others do not, a comparison of the social conditions is deemed helpful to the extent that it allows us to question our own culture. However, these tests and comparisons don't necessarily translate into an accurate assessment of high schools around the world. Much sociological and psychological research has indicated that parents and their social and economic resources have greater influence on student achievement. Thus, the pressure on the educational system to “do something” is unfair if it is not coupled with pressure on parents and governments. It is also a stretch to interpret the lower test performance of U.S. students as a predictor of future economic insecurity. Any research psychologist will tell you that no test is perfect and very few studies in education can be used to draw causal inferences.

### Additional Resources

- M. Carnoy and R. Rothstein, “What International Test Scores Tell Us,” *Society* (vol. 52, 2015).
- D. C. Geary, “International Differences in Mathematical Achievement: Their Nature, Causes, and Consequences,” *Current Directions in Psychological Science* (vol. 5, 1996).
- S. L. Morgan and E. S. Taylor Poppe, “The Consequences of International Comparisons for Public Support of K-12 Education: Evidence from a National Survey Experiment,” *Educational Researcher* (vol. 41, 2012).
- H. W. Stevenson, C. Chen, and S. Y. Lee, “Mathematics Achievement of Chinese, Japanese, and American Children: Ten Years Later,” *Science* (vol. 259, 1993).