

# education futures

## REVIEW

<https://educationfutures.com/review>

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### **What we've learned:**

1. As schools try to learn about themselves through the PISA for Schools program, “the language of ‘elsewhere’ is used to justify local reform,” challenging traditional governance.
2. An excessive focus on PISA scores alone oversimplifies more complex issues in school performance.
3. Young children can differentiate between direct and indirect knowledge.
4. We do not know how the use of tablet computers improves learning.
5. The best predictors for success in a MOOC are prior experience and intended time spent with it by students.
6. Adults that were unschooled as children report themselves to be doing just fine, and are employed largely in creative and knowledge work.

## Welcome from the editor

*Has the OECD become the “Ministry of Education for the World”?* As many schools near testing season, we open with two articles from Australia that look into the reach of the OECD through its PISA regime and how this impacts policy at both national and school levels.

This issue marks the launch of *Education Futures Review*: A digest of essential academic literature in education. This newsletter curated to highlight the best, new thinking in education and is designed for decision-makers and leaders in K-12 and higher education, connecting with research, reports, and articles that might otherwise go unnoticed.

This serial covers “pre-K to grey” education news and research from around the world, with an approximately equal focus on both primary/secondary and tertiary education. Topical areas include: learning technologies, new approaches and concepts about learning, innovation in education, insightful research, and case studies for leaders, incorporating experiences from around the world.

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Sincerely,  
John Moravec, Ph.D.  
Editor, *Education Futures Review*

## 1. PISA for Schools: Topological rationality and new spaces of the OECD's global educational governance

**Source:** Comparative Education Review (2016), Vol. 60, No. 1, pp. 27-57

**Author(s):** Steven Lewis, Sam Sellar, & Bob Lingard

**Link:** <http://dx.doi.org/10.1086/684458>

*As schools try to learn about themselves through the PISA-based Test for Schools ("PISA for Schools") program, "the language of 'elsewhere' is used to justify local reform" (p. 50). This suggests that, even at a local level, the OECD exerts tremendous influence through its PISA programs.*

The PISA for Schools program is designed to allow schools to make comparisons among and between each other, based on the PISA exam. In this article, the authors analyzed 33 interviews with OECD staff, and "relevant edu-businesses, not-for-profit organizations, and philanthropic foundations," in addition to relevant literature. They found that the ability of the OECD to enable the creation of school-to-school comparisons facilitated new *heterarchical* forms of educational governance.

By this, they mean that the traditional, top-down form of government-to-school governance is now complemented with an OECD-to-schools layer. By gaining of what is happening "elsewhere" (globally), schools find justifications for making reforms locally, thus potentially augmenting (or even bypassing) higher levels of local and national-level policy development. In this sense, governance for schools in the PISA for Schools program has a new, added horizontal dimension (peer-to-peer) in addition to the vertical dimension of traditional governance.

/JM

## 2. Leaning too far? PISA, policy and Australia's 'top five' ambitions

**Source:** Discourse: Studies in the Cultural Politics of Education (2015), Vol. 36, No. 5, pp. 647-664

**Author(s)** Radhika Gorur & Margaret Wu

**Link:** <http://dx.doi.org/10.1080/01596306.2014.930020>

*An excessive focus on PISA scores alone oversimplifies more complex issues in school performance. This suggests that policy makers need to focus less on aggregate, average scores, and look more into the details of school performance.*

Looking into the Australian government's desire to propel to nation to the list of the top five performing nations on the PISA by 2025, the authors looked into the usefulness of using PISA data to drive educational policy. They found that the rankings that policymakers rely on obscure more nuanced data that are more useful

for determining policy than the rankings alone. Further, critiquing the usefulness of PISA for policymaking, they cited prior research that suggests that many decision makers simply do not understand the technical aspects of PISA and how to interpret the data.

Although politicians and policymakers have decried a “crisis” in education, taking a deeper look into Australia’s case, the authors found that there was no real crisis to be found. What they found, instead, was a high amount of performance variance, that suggests there are “possible differences between what is valued in Australian curricula and what is tested in PISA” (p. 662). Policymakers would do well to understand the variances within the data rather than the average scores and table rankings.

/JM

### **3. What could you really learn on your own?: Understanding the epistemic limitations of knowledge acquisition**

**Source:** Child Development (preprint article)

**Author(s)** Kristi L. Lockhart, Mariel K. Goddu, Eric D. Smith, & Frank C. Keil

**Link:** <http://dx.doi.org/10.1111/cdev.12469>

*Young children can differentiate between direct and indirect knowledge. This helps to inform us on how to enable children to learn on their own, including how to manage social relationships.*

Distinguishing between direct knowledge vs. indirect knowledge can be a difficult task for many people, but is critical in modern society. Courts, for example, rely on eyewitnesses (direct knowledge) and do not value hearsay (indirect knowledge). Direct knowledge is viewed as possessing higher integrity than indirect knowledge, which can pass on false truths and beliefs, unintentional or not. Indirect knowledge, on the other hand, helps to build our sense of shared, social knowledge. How do children make distinctions between the sources of their knowledge?

The researchers recruited groups of kindergarteners, fourth graders, and university students to review 31 stimulus items: “18 of which described knowledge that can only be acquired secondhand, such as knowledge about invisible processes or things (e.g., germs), historical figures or events (e.g., dinosaurs or George Washing- ton), and 13 of which described knowledge that could be acquired firsthand through perception (e.g., that the sky is blue) or through personal experience (e.g., that one sleeps when one is tired).” The participants were then led in an imaginative scenario where they had to determine what a man who had been stranded on a deserted island his entire life, alone since birth, would know or not know. The idea is that such a man would only have knowledge that was acquired first hand.

The researchers found that each group of participants could differentiate direct knowledge and experience from indirect knowledge and experience. Most importantly, they found, “even young school children have a clear sense of the kinds of direct knowledge an individual could acquire growing up on their own in isolation from any cultural influences as opposed to indirect information that requires cultural transmission of some sort” (p. 12). A couple key implications this suggests are that teacher-student relationships can be better “calibrated” with a better understanding of what is self-learnable, and younger children may be more prone to misunderstanding social relationships because they feel they can discover them firsthand as opposed to having been learned socially (p. 14).

/JM

#### **4. Tablet use in schools: A critical review of the evidence for learning outcomes**

**Source:** Journal of Computer Assisted Learning (preprint article)

**Author(s)** B. Haßler, L. Major, & S. Hennessy

**Link:** <http://dx.doi.org/10.1111/jcal.12123>

*We do not know how the use of tablet computers improves learning. The evidence suggests that unknown factors, together with tablets, may lead to greater gains.*

The authors of this study took a hard look at 23 studies that reported the use of tablets by primary and secondary school children. They aimed to “determine if, when and how using tablets might impact on learning outcomes: do the knowledge and skills of students increase following the use of tablets for particular purposes, and, if so, what factors contribute to successful or unsuccessful use?” (p. 2).

After the review, they found that 16 of them reported positive learning outcomes, 2 were negative, and five showed no difference. When looking in to how tablets impact learning, the authors found that the reality was much more complex than expecting measurable improvement with the presence of tablets as an intervention factor alone. While acknowledging the limitations of their literature review, they suspected professional development opportunities for teachers may play a bigger role with the successful implementation of tablet-based learning in schools over student-device ratios (p. 14). Nonetheless, without clear evidence present, they concluded there is much room for further research.

/JM

#### **5. Predictors of retention and achievement in a massive open online course**

**Source:** American Educational Research Journal (2015), Vol. 52, No. 5, pp. 925-955  
**Author(s)** Jeffrey A. Greene, Christopher A. Oswald, & Jeffrey Pomerantz  
**Link:** <http://dx.doi.org/10.3102/0002831215584621>

*The best predictors for success in a MOOC are prior experience and intended time spent with it by students. This suggests that if we are to rely on MOOCs for student instruction, we need to rethink how we introduce students to MOOC-like learning.*

MOOCs have gained in popularity across a variety of institutions over recent years, with a promise to revolutionize learning. The problem is that they suffer from low retention. A MOOC may attract many student participants, but it is common for a low percentage to actually complete the course – often dropping below 10% (p. 927). Why?

The authors found “empirical research on achievement in MOOCs is rare” (p. 929), so they sought to look into predictors of retention through a MOOC offered by their own institution, the University of North Carolina at Chapel Hill. After building a list of hypotheses to be tested, based on Carol Dweck’s work on implicit theories of intelligence. Their findings, limited from their study of their single MOOC, suggest that the best predictor for likelihood of dropout was prior experience with other MOOCs. As for achievement, they found that “intended hours spent on the MOOC had a positive, statistically significant relationship with achievement” (p. 947).

This, of course, leaves much room for further investigation as it suggest a “chicken and egg”-type problem. If the greatest predictor for staying in a MOOC is having prior MOOC experience, how can work to ensure student commitment the first time?

/JM

## **6. Grown unschoolers’ experiences with higher education and employment: Report II on a survey of 75 unschooled adults**

**Source:** Other Education (2015), Vol. 4, No. 2, pp. 925-955  
**Author(s)** Gina Riley & Peter Gray  
**Link:** <http://www.othereducation.org/index.php/OE/article/view/104>

*Adults that were unschooled as children report themselves to be doing just fine, and are employed largely in creative and knowledge work. They credited unschooling for promoting their personal responsibility, self-motivation, and desire to learn.*

This article presents the first known research into experiences with higher education and careers by unschoolers. The idea that unschoolers learn through free play is thought by practitioners to enhance the development of creativity and self-motivation among children, but do they emerge as capable, creative adults?

In a survey of 75 adults, who have been unschooled for at least the last two years of high school, the author found that 83% of them continued on to higher education, and 44% completed (or were expecting to complete) a bachelor's degree program. As for employment, "the survey responses also revealed a general willingness, even eagerness, to change employment as interests changed. Many said that they were still exploring, playing, and learning, and that as their lives evolved their jobs would change too" (p. 45). Approximately half of the respondents (53%) reported that they had become entrepreneurs, and another approximate half reported that they were engaged in (or pursuing careers in) the creative arts (48%). Even more interesting:

Concerning higher education, it is noteworthy that those who were in the most unschooled group, who had skipped all of K-12, were also the most likely to pursue a bachelor's degree or higher. Some of them had rarely or never been previously in a classroom, or read a textbook, or been required to study a topic that they wouldn't have chosen to study, or taken an academic examination, yet found themselves getting A's and earning honors, both in community college courses and in bachelor's programs. Apparently, the lack of an imposed curriculum had not deprived them of the background knowledge and skills needed for college success. Consistently, they reported that the attitudinal and motivational benefits they had acquired in unschooling more than outweighed any handicap that might have resulted from their not having taken the standard high-school courses that are supposed to prepare people for college. (p. 47)

An important limitation of this study is that participants were recruited from the Internet, not a random selection of all unschoolers, increasing the risk of self-selection effects, where those who are still engaged with unschooling (or are more likely to have had skewed experiences with unschooling) are likely to respond. Nonetheless, the authors claim this study strongly suggests unschooling can lead to future success and satisfaction in life, opening pathways to a new body of research.

/JM

## Glossary of terms used in this issue

- **MOOC:** Massive open online course. An online course designed for unlimited participation and open access via the Web.
- **OECD:** Organization for Economic Cooperation and Development. An international economic organization founded in 1961 to stimulate economic progress and world trade.
- **PISA:** Programme for International Student Assessment. A study organized by the OECD every three years to look at 15-year-old student performance in mathematics, science, and reading. Its purpose is to help inform policy through comparative measurement.
- **Unschooling:** An educational method and philosophy that advocates for “life learning” — activities chosen by the learner, often through play, as their primary means for learning. “Unschoolers” neither go to a traditional school nor are homeschooled through a curriculum-based program.

## Colophon

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